

American Bee Journal

MAY, 1951

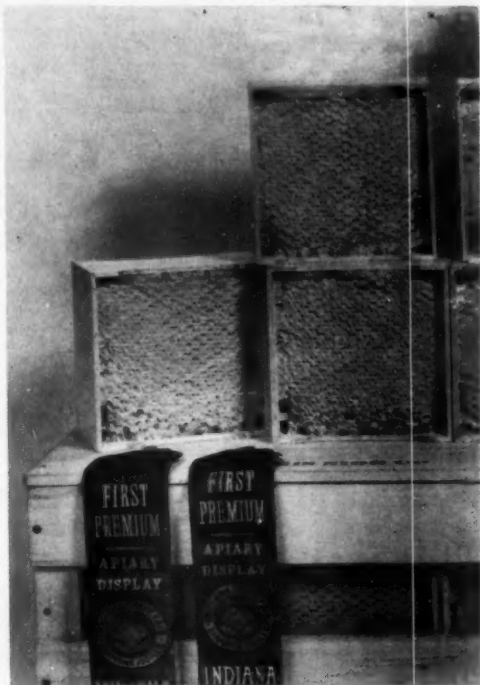


VOLUME 81

NO. 5

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The Cover Winner

Norman Mahoney

Maplewood, Mo.

Missouri is doing well with this picture from Norm Mahoney and the one last time from Lee Jenkins. The St. Louis Post Dispatch calls this a picture of the cradle for the "Eaglet who never flew." It was created for Napoleon's son, the "king of Rome."

Mahoney says: "It was presented on March 5, 1811, by the City of Paris to Napoleon I and the Empress Marie Louise, Archduchess of Austria, shortly before the birth of their son. Fashioned with superlative skill in silver-gilt and mother-of-pearl, the cradle was made by Jean Baptiste, Claude Odier, and Pierre Philippe Thomire after a design by Pierre Paul Prud'hon. The three rows of golden bees completely encircle the crib."

"L'Aiglon, whose much heralded birth it commemorates, lived to be only twenty-one years of age and died in 1832 at the Imperial Austrian

summer place of Schonbrunn. The cradle is a part of the 80 million dollar Imperial Vienna art treasures touring this country. They were exhibited, admission free, at the City Art Museum in St. Louis from March 4 to April 22. Then to Toledo from May 24 to June 27. Finally to Toronto." Norm also comments on the Gobelin tapestries at the exhibit: "I have never seen anything like them. They are not only brilliantly colored, unlike the usual drab pastel hues, but they are immense. Somewhere around sixteen by twenty-five feet."

The following remarks about the cradle are from an article in the Everyday Magazine section of the Post-Dispatch: "It is a cradle that doesn't rock. In a stage version, however, the cradle did rock and the eaglet soared for a time in spirit at least, when in 1903 Sarah Bernhardt played 'L'Aiglon.' In all ma-

for productions of Edmond Rostand's play about the tragic prince, the title role has been taken by women, among them Maude Adams and Eva Le Gallienne.

"To prevent tarnishing, this treasure has never before been on view in America without its glass case. The fresh departure is a tribute to our city's atmosphere. The figure above the cradle's hood is a winged victory holding a crown of 'Triumph and Immortality.' An imperious young eagle perches at the foot of the cradle as on an eyrie. Chased panels of the bed represent the river Seine receiving the child from the god Mercury and the River Tiber viewing the rising star of the new king of Rome. All in all, Napoleon II's cradle presents rather a contrast with the carpet on which Napoleon's peasant mother brought him into the world."

Between Hay and Grass

With the farmer in spring, sooner or later comes the time when the green grass is still too short for pasture and the barn is depleted of hay by the winter's demands.

It is quite similar with our honey bees. As the queen starts her egg laying in the spring, and as the brood area expands more and more, the nurse bees must need to have plenty of honey and pollen to supply the growing young. If not, the queen is retarded in her laying, and we come to the days of nectar yield with a colony lacking both in strength

and colony morale.

The fortuitous beekeeper is the one who is able to judge his colonies and to furnish them with ample supplies of both pollen supplements and sugar sirup, and yet not feed to the point where the queen may be restricted in her egg-laying circles by cells filled with excess food.

Until the first main honeyflow is on, one is never sure that his best colonies may not be the ones which through misjudgment may starve from the lack of pollen and honey.

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Volume 91, No. 5

May, 1951

THE AMERICAN BEE JOURNAL

HAMILTON, ILLINOIS

Editor—G. H. Cale

Associate Editors—M. G. Dadant, Frank C. Pellett, Roy A. Grout

Managing Editor—Adelaide Fraser

Published monthly at Hamilton, Illinois. Entered as second class matter at the Post Office Hamilton, Illinois; in the United States, Canada and Mexico, \$3.00 a year; two years \$3.00; three years \$4.00. Foreign \$2.50 a year; two years \$4.00; three years \$5.50. Subscription stopped at expiration date printed on wrapper.

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• • • NEXT MONTH • • •

The value of a piece of equipment can only be determined by whether it will save labor, perform a definite function, or provide sufficient additional returns to warrant its use. E. Braun, of the Dominion Experimental Farm, Brandon, Manitoba, discusses the value of queen excluders in an outstanding article in our June issue-to-come: "Shall We Use Queen Excluders?" His conclusions, based on twenty-eight years of experience in an experimental apiary, are practical and thought-provoking.

A new idea with practical possibilities was presented in a talk at the Denver convention of the Federation by Chas. C. Hansen of Texas. This suggestion is so valuable that the talk has been prepared for publication and will appear in your next Journal. Watch for "A Foundation for Research" and let us know what you think about it.

Last year a study was made by the Iowa State Agricultural Experiment Station to determine the effect of honey-bee pollinating activity on red clover seed production under central Iowa conditions. We are glad to be able to publish the report of this study together with results obtained and photographed. Those engaged in red clover pollination will find this report of value in the efficient location of pollinating colonies in red clover fields. Next month don't miss "Red Clover Pollination at Various Distances from Honey-Bee Colonies."

What's Going On

Annual Short Course Ames, Iowa

Mr. Lyman Coe, of the Samuel Roberts Noble Foundation at Ardmore, Oklahoma, will be the guest speaker for the Annual Short Course for Beekeepers held in Ames on May 8 and 9. Dr. Coe has been actively engaged in recent work with bees and their relation to pollination. He has been in charge of the program development for the pollination conference which was held recently at Ardmore and which was sponsored by the Foundation in cooperation with the American Beekeeping Federation. Dr. Coe will certainly have a message of importance to beekeepers and to all who may be interested in legume seed pollination. Anyone interested in any of the details of the program is invited to attend. There is no enrollment fee. A detailed program will be available upon request about May 1 and can be obtained by writing F. B. Paddock, Ames, Iowa.

F. B. Paddock,
Extension Apiarist.

North Jersey Beekeepers Assoc. Summer Schedule

The first outdoor meeting of the association will be held at Mina and Fred Conrad's place in Woodcliff Lake on May 27 at 2 P.M. Mr. Piggleback will be the speaker.

On June 24 there will be a meeting at Willet's Farm sponsored by Chas. Giguere, Anderson Ave., Demarest. We hope to get Paul Holcombe to give an outdoor demonstration. July 22 a meeting will be held at Joe Mayer's queen rearing yard. Come and see Joe do some grafting. There will be no meeting in August. The September date is not set, but the meeting will be held at Manor Apiaries with Parker Hamilton playing host to the New York and New Jersey beekeepers. On October 25, Mr. Lampor will speak at a meeting at the Court House.

Essex Beekeepers Invite

The Essex Beekeepers' Association of England is holding their annual conference on Saturday, July 14. They invite any American beekeepers who may be in that country at that time to attend their meeting.

Middlesex County Beekeeper's Assoc. Weston, Mass., May 26

The first outdoor meeting will be held at the home of Mrs. Stephen S. Fitzgerald at 62 South Ave., Weston, Mass., on May 26. Members will have an opportunity to inspect the "club hive" which was started in April, and to visit the Farm & Garden and Hothouse displays on the Fitzgerald estate. There will be a picnic supper for all.

Many members have contributed and more are urged to give to the fund being raised by the Massachusetts Federation of Beekeepers to place a plaque in honor of L. L. Langstroth at his church in North Andover, Mass. Address contributions to Wallace R. Parker, Sec'y, 12 Prospect St., West Boylston, Mass.

John H. Furber, Sec'y-Treas.

Westchester Co. Beekeepers Assoc. New Rochelle, N.Y., May 20

The regular monthly meeting of the association will be held Sunday, May 20 at 2:30 P.M. in the Odd Fellows Hall, 20 Lockwood Ave., New Rochelle, N.Y. P. J. Hewitt, Jr., president of the Connecticut State Beekeepers Association will be guest speaker. Mr. Hewitt is also a bee inspector. This meeting will be interesting and informative and all members are urged to make a special effort to attend.

A. M. Barnes, Publicity.

New Association Organized

On March 27 in Fairfield, Iowa, the Jefferson County Beekeepers Association was organized with the following officers elected: President, Max Somerville, Fairfield; Vice-President, Gerald Linn, Fairfield; Secretary, J. W. Stine, Fairfield; Treasurer, James Taylor, Fairfield. The directors are: J. I. Danielson, Burt Kann, O. L. Kilion, Ralph Lawson and James Taylor.

More than enough names have been signed to a petition to the county supervisors for an appropriation for inspection in the county. A field meet will be held the latter part of June in or near Fairfield. There will be outside speakers, a basket dinner, and visits to nearby apiaries.

J. W. Stine, sec'y.

Meeting Date Changed

The meeting being planned by the St. Clair Beekeepers Association for southern and central Illinois beekeepers will be held on May 20 instead of May 13 as announced in the last issue. The place is still the Highway Building just off the square in Belleville; the time—10 a. m. to 5 p. m., daylight saving time.

A fine program is being planned with outstanding speakers. Topics discussed will be zone meetings and the 1952 Southern Zone meeting, organization, support of the American Beekeeping Federation, the sanitation code, pollination, and other vital problems.

G. L. Hankammer

Cook DuPage Beekeepers Assoc. Des Plaines, May 20

First outdoor meeting of the year will be held at the apiary of John Lis, Higgins Road, 1/4 mile west of Route 45, Des Plaines, Ill. The date of the meeting is May 20 starting at 10 a. m. Bring something for a pot luck picnic dinner at 1 p. m. Coffee will be served. A fine program is being arranged, including the presentation of hives to 4-H boys. Anyone interested in beekeeping is invited.

A. J. Smith, Sec'y

UNIVERSITY OF MINNESOTA

Tentative Program of the Beekeeping Short Course

- | | |
|-------------|---|
| A.M. | Wednesday, May 9 |
| 9:15 | Why beekeeping—M. H. Haydak |
| 10:00 | Spring work in the apiary—J. A. Munro |
| 11:00 | The life story of the bee—M. H. Haydak |
| P.M. | |
| 1:30 | Bees, plants, and man—C. D. Floyd |
| 2:30 | Let's look at those new beekeeping methods—H. J. Rahmlow |
| 3:30 | Installing packages of bees in the bee yard |
| A.M. | Thursday, May 10 |
| 9:00 | How to get better bees—M. H. Haydak |
| 10:00 | Swarming and its control—H. J. Rahmlow |
| 11:00 | What to do during the summer—C. D. Floyd |
| P.M. | |
| 1:30 | Queens and queen rearing—M. H. Haydak |
| 2:30 | Know your honey—J. A. Munro |
| 3:30 | Fall management and wintering—M. H. Haydak |
| 6:30 | Informal meeting (Mr. Rahmlow will show a movie on the new methods in beekeeping and Dr. Munro will talk on changing role of beekeeping. This is an opportunity to visit and exchange ideas.) |
| A.M. | Friday, May 11 |
| 9:00 | Adult bee diseases and enemies—M. H. Haydak |
| 10:00 | Brood diseases and their control—T. A. Gschnauer |
| 11:00 | Legal aspects of beekeeping—C. D. Floyd |
| P.M. | |
| 1:30 | Beekeeping movies |
| 2:30 | Question Box |

(Continued on Page 187)

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by Edw. A. Wolfe

Director of Public Relations
American Beekeeping Federation

THE hive-marked road which led several hundred people from Ardmore to Lake Murray Lodge to attend the Seventh Annual Pollination Conference was no doubt surprised as it watched the group come in. Even though in the minds of many, this was just another "bee meeting," those attending came from 16 states and the Dominion of Canada. There were beekeepers in attendance of course, but their number was dwarfed by those representing other phases of agriculture where pollination is an important part of their ultimate success. There were farmers, seed producers, seed improvement workers, agronomists, entomologists, county agents, Soil Conservation Service and Production Marketing Administration representatives, bankers and machinery representatives. Almost without exception, they came with one thought in mind—to learn. Several of the moderators in charge of different panels expressed themselves as amazed at the interest shown by both the speakers and those in the audience. Dr. Howard W. Larsh of the University of Oklahoma publicly stated, "Agriculture tomorrow will be better because men like you were here today."

During the three days of the meetings, those in attendance listened to county agents speak of their experiences in seed production, they heard scientists discuss watermelons, cantaloupes, fruits of different kinds, legumes, cotton, and were surprised to hear one scientist say that even the sorghums may well be included in the group of crops that benefit from the visits of pollinating insects.

Even though no beekeeper appeared on the speaking program, the honey bee was the focal point of interest. This was true whether the topic of discussion was crop production or insects and insect control. Dr. G. E. Bohart, Division of Bee Culture, Logan, Utah, gave an excellent discussion of our insect population. He mentioned the wasps,

the beetles, the moths, and other insects that are useful as pollinators. He indicated there are more than 60 different species of wild bees that probably are better pollinators than the honey bee, but in each case came back to the thought that the honey bee is the only dependable pollinating insect. Although most of the speakers were scientists, discussions were maintained at a level that could be understood by everyone. As Bert Spencer, a farmer from Grimes, Oklahoma, told me, "I wish we could have had meetings like this forty years ago."

One entire afternoon was given over to discussion of harvester operation, an open discussion of problems in harvesting, and a display of different kinds of machines representing the companies of J. I. Case, Minneapolis-Moline, International Harvester, John Deere, Massey-Harris, Allis-Chalmers, and Dearborn Motors. Here again, those leading the discussions found themselves hard put to find answers to all of the questions that were asked from the floor.

The three-day meeting was filled to the brim and overflowing with speakers who had information to present which had a direct bearing on the relation of the honey bee to our modern agriculture.

The meeting was liberally spiced with pertinent questions from the floor which sometimes required the knowledge of three or four to provide complete and satisfactory answer. The meeting was driven by the urgent force of man's desire to learn more that he might be able to do better.

But, the conference was not without its moments of sober thinking and its moments of humor. I heard Louis Bromfield plea for a program of agriculture based "Not on how much can we take from Nature, but how best can we live with Nature." I heard a question read to a panel which it was not able to answer.

The question was referred to a man seated in the audience who promptly replied, "That's my question." I heard a man prominent in seed improvement work, state, "If anyone had told me two years ago that I would be attending a bee meeting today, I would have said he was crazy." I heard another say, "Who would ever expect to see a display of machinery like this at a bee meeting?" I heard spinach referred to as "Yankee legume," but the man who said it all in a few words was the one who, as he left the lodge, said to his companion, "There ought to be more like Ardmore."

What's Going On

(Continued from Page 185)

XIV INTERNATIONAL BEEKEEPING CONGRESS

BRITISH ORGANISING COMMITTEE

President—Dr. R. H. Barnes

Outline of Programme subject to alteration

MONDAY, 2nd SEPTEMBER

Registration of Members of Congress in the Town Hall, Leamington Spa, where they will receive the official programme, members badge, copies of papers, etc.

Monday Evening: Reception by The Right Worshipful the Mayor of Leamington Spa.

TUESDAY, 4th SEPTEMBER

Morning sessions of papers.

Afternoon sessions of papers.

Evening: Congress Dinner. Informal dress. (Cost included in registration fee.)

WEDNESDAY, 5th SEPTEMBER

Whole day excursion to Gloucestershire (cost included in registration fee).

Evening: Free.

THURSDAY, 6th SEPTEMBER

Morning and early afternoon sessions of papers. Afternoon optional excursion to Warwick and Stratford-upon-Avon. Approximate cost 5/-.

Evening: Free, or attend Play at Shakespeare Memorial Theatre, Stratford-upon-Avon. Approximate cost for dinner and theatre 3/-.

FRIDAY, 7th SEPTEMBER

Morning sessions of papers.

Afternoon sessions of papers.

5 p. m. Apimondia Meeting re World Federation of Beekeepers.

Evening: Films.

SATURDAY, 8th SEPTEMBER

Honey Show.

Papers to be read will be presented in the following sessions:

Pollination and Spraying Problems;

Nectar, Pollen and Honey;

Bee Behaviour and Physiology;

Bee Breeding; Bee Diseases;

Scientific Colony Management;

and a session of papers of general interest.

Warwickshire Beekeepers Association are organising a show of honey, bees wax, mead and beekeeping equipment during the 6th, 7th and 8th September which will be of interest to Congress members.

Beekeepers from other countries are invited to bring samples of honey (approximately ½ kilo in glass jar) for display in the section which is being devoted to an exhibition of honey from other lands. Honey samples should be labelled with the owner's name and country, and the source of the honey stated.

Will Association Secretaries please note that accommodation in Leamington Spa is limited and Associations intending to elect delegates to attend the Congress are advised to send in names of delegates as soon as possible.

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American Bee Journal

Hamilton, Illinois

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THE NEWSREEL



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The Florida Honey Co-operative, Inc., is pleased to announce a long-time agreement entered into by them with R. B. Willson, Inc., of New York, for the sale and distribution of their honey. Florida producers are thus assured of a good market for their honey at good prices, and Willson is assured of a large and dependable source of supply of well graded honey of good body and flavor, that has been well prepared for market.

This Co-op has a well equipped plant that is doing a large volume of business, and welcomes more Florida beekeepers into its membership.

John N. DeMuth, Sec'y-Treas.

Hadacol

Hadacol, that all purpose remedy "for a better tomorrow," is reported to be using substantial quantities of honey in its preparation. Information has come to us that upwards to a million pounds of honey was consumed in this way during 1950. Hadacol is a highly advertised concoction that is big business today.

Reported to be a mixture of minerals, vitamins, and water containing twelve per cent alcohol (as a preservative), we are informed that each bottle contains 18 drops of honey. We do not know how many bottles, at 18 drops, it takes to consume upwards to a million pounds of honey, but we know it's a lot of them.

Illinois Report . . .

The 57th and 58th report of the Illinois State Beekeepers' Association for the years 1947-48 has just appeared. A 174-page volume, it covers the meetings for both years as well as a report of the incidence of disease in Illinois as found by Chief Carl Killion and his deputies during these years.

Mr. Killion and his staff have reduced the disease to a net of 2.4 per cent, the heaviest infection still being in the central and western counties.

Included in the report are papers or excerpts read at the two annual conventions. We assume that copies of this report may be obtained by addressing the secretary of the association, Mr. Hoyt Taylor at Pleasant Plains, Illinois.

Every Bee Under A Basket

In an earnest and carefully prepared presentation, representatives of the beekeeping industry pointed out to Washington officials that the minimum support level had not been and would not be sufficient to maintain beekeeping. They seriously requested a higher support level because of the importance of honey bees through pollination to the production of more than fifty food and seed crops.

Secretary Brannan and the Commodity Credit Corporation gave to our industry the minimum required under law, although they continue to preach the philosophy of 100 per cent of parity for agriculture.

If it were possible to confine every honey bee during the time that flowers bloomed in one year to fully demonstrate their value as pollinators, we are inclined to wonder how soon officials would awaken to the fact.

Government Honey Programs

On April 5 the U. S. Department of Agriculture announced that the support price for honey of wide acceptability for table use will be 10.1 cents per pound, while about a dozen flavors of limited acceptability will be supported at 9 cents per pound. These prices are designed to reflect approximately 60 per cent of the parity price for honey in 60-pound containers. Honey will be purchased, when necessary, from packers who pay not less than the applicable support price for all eligible honey acquired from beekeepers after the packers have entered into agreements with the Commodity Credit Corporation. Prices paid to packers

will include handling costs.

Under the export program, payments of 4.5 cents per pound, or up to 50 per cent of the f.a.s. price or of the domestic market price—whichever is lower—will be paid to exporters of honey. The export program is designed to help private traders to sell honey to destinations outside of this hemisphere.

Payments also will be made to packers who sell honey into diversion outlets at the market price less the amount of a payment which will be announced later. The diversion outlet must be approved by the Department and will include products in which no honey has been used

since January 1, 1948, or those products for which manufacturers develop new formulas entailing the increased use of honey.

Further details of the program and application forms can be obtained from the Fruit and Vegetable Branch, Production and Marketing Administration, Department of Agriculture, Washington 25, D. C.; from R. M. Walker, 333-335 Fall St., San Francisco 2, Calif.; or from Chester A. Halnan, Room 620, 90 Church St., New York 7, N. Y. As soon as these programs are issued by Washington, the American Bee Journal will carry full information.

Give the New Grades a Trial

In 1950, the July and August issues of the American Bee Journal carried editorials on the proposed new grades for honey. Favoring the adoption of more exacting grades for extracted honey, but severely criticizing flavor as a basis for grading honey and the limiting factors of the point-grading system, the American Bee Journal urged members of the industry to file their objections and suggestions with the Production and Marketing Administration in Washington.

We must admit that we apparently failed to stir up the beekeeping industry.

The Honey Grades Committee of the American Beekeeping Federation, with Dr. E. F. Phillips as acting chairman, reported its recommendations to the Denver convention. Briefly, it recommended that color grades be the same as those established for the Pfund grader, that minor changes be made in the size of sieves under "absence from defects," and that flavor as a basis for grading be eliminated. These recommendations were adopted by the convention.

The new grades for extracted honey, issued March 16 and effective April 15, 1951, in a large measure accepted these recommendations but included flavor as a basis for grading honey.

Those inclined to be critical of the new

grades should remember that a great amount of thought and work has gone into the writing of this regulation. The very people who issued it are the ones who, in a large measure, are going to have to make it work. Perhaps it will lead to the development of ways of measuring flavor; perhaps it will result in the development of "official honey tasters." It would appear that, having issued such a regulation, it would be up to the Production and Marketing Administration to establish an official grading center for the honey industry.

We might add further that, unless more rigid requirements and policing of the industry are subsequently required, most will continue to sell and buy honey on sample, and labeled without reference to grade. And the new grades will be used mainly for inspection of honey moving to the government under the price-support program.

Certainly there is good reason for attempting to grade honey on the basis of flavor for the predominant floral source or blend of floral sources. If we are to market honey which we say is delicious, it certainly should be of good flavor. At some time or other we all have tasted honey which we did not consider of good flavor. Let's give this new grading system a trial; it may be better than we think. If it can't be made workable, we can always change it.



An apiary like this is the owner's pride and joy. With today's methods he can keep it with every surer that he will have little, if any, American foulbrood.



Childers (right) and Haseman (left) demonstrate how sulfathiazole may be used in disease control. Now disease prevention in this way is standard practice.

Up-To-Date Disease Control

by G. H. Cale

SLOWLY, but persistently, a way to control American foulbrood has been spreading through the ranks of beekeepers until it has completely changed our measures.

The time was when the amount of work and money and strict management needed to keep this disease to a low point accounted for a fourth to a third of the total required for all other management. Even then, it was seldom that some colonies with AFB did not show each year, more in some yards than in others; but always fearful. We did not dare relax. Burning was the only safe measure we had to get rid of the individuals that showed the disease.

And today fire is still complete and final. Don't ever forget that. What improvement we have made is mainly in prevention; not in cure. Truth is that with the very low percentage of American foulbrood we now have, we can hardly afford the time to "doctor" and we can't afford the risk either.

Another point in favor of what we used to do. Whenever a colony was opened, the first glance at brood was for disease, particularly in the emerging areas, where telltale cells of dead larvae are so plain to be seen. This is an automatic habit and a good one. Also when adding supers, a comb or two of this kind of brood were looked over before the supers were given. When supers were removed, a comb or two of brood were again looked over before the supers were taken away from the yard. In this way disease cases were spotted and destroyed.

All the care we have used and made a part of our ways is still good practice. I am sure that inspectors will tell you that the trouble they have with beekeepers who are most responsible for the continuance and spread of American foulbrood arises from either ignorant carelessness or deliberate disregard. The careful man was a pretty good one, and he is still the one who gets the results

out of our new ways.

Now we have not come to the point yet. What is our up-to-date way of control? Much has been said about it. It rests on two new things in beekeeping:

1. Preventive feeding.
2. Resistant stock.

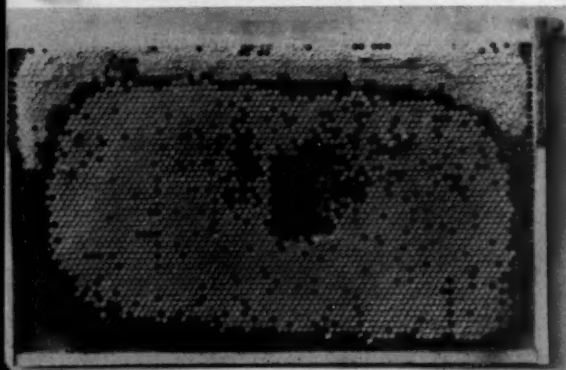
Used together, disease simply is not. And we know, as we have adopted it altogether and seldom have American foulbrood.

Whenever you feed bees, before supering, in spring or in fall, dissolve a quarter teaspoonful of sodium sulfathiazole in each container (pail, jar, division board or what have you). When you queen use the best resistant queens you can buy. By best we mean good honey producers, nice color, gentle, fine brooders (nice, even brood patterns).

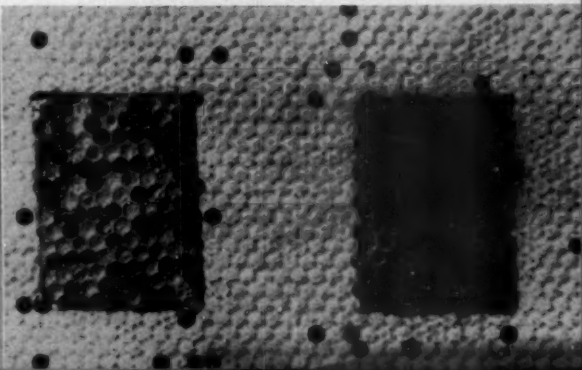
Just do this steadily for two or three years and see how much simpler your beekeeping becomes.

But, remember this, if you do find American foulbrood, burn it.

Inserts of American foulbrood, in a comb of brood of resistant stock, to determine the degree and effectiveness of the resistance.



In this comb, the disease insert has been reduced to the midrib by the bees and the cells polished. Later brood in this area was disease free.



Purple Loosestrife For Bees

by Frank C. Pellett

A good honey plant for naturalizing in marshes and along streams.

THE purple loosestrife (*Lythrum salicaria*) is one of the most adaptable plants so far tried in the American Bee Journal honey plant gardens. It will do very well on dry upland, but it does better in wet places where the soil is constantly moist. It will even grow in shallow water. As far as I can discover, it will succeed on almost any kind of soil where common plants will grow.

Once established it is quite permanent and will spread slowly, greatly to the advantage of the beekeeper. The original home of this lythrum was Europe and surrounding areas in Asia and North Africa but it has become widely naturalized in America and other parts of the temperate world.

When in bloom, the purple loosestrife is a very attractive ornamental and gardeners are developing numerous showy varieties which are very popular for park and border planting. The long spikes of brightly colored flowers are in various shades of red or pink which give rise to the common name of "Red Sally."

Beemen who live in the vicinity of swampy areas are quite successful in naturalizing purple loosestrife on soils so wet that there is little danger of removal by cultivation. I have seen it growing in water two to four inches deep where it seemed quite at home. On such land, which is usually occupied by cattails and similar plants, there are few really good honey plants which are suitable. The flowering period is in midsummer and lasts for several weeks. In localities where the main honeyflow is from white Dutch clover, the loosestrife extends the season to a very helpful extent.

The seed is very fine and requires favorable conditions at time of germination. It is of easy culture, however, and because of its long life and abundant flowers it is growing in popularity as a garden flower.

The best way to establish it in wasteland areas is to start the plants in a greenhouse and when a few inches high transplant them to the open ground at widely separated

points. It forms seed in great abundance and scatters it slowly over long intervals thus assuring that a portion of the seed will find conditions favorable.

In our garden, the flowers are usually swarming with bees for several weeks but we do not have enough of it to judge either the quality or the quantity of honey. There is a wide variation in the reports from beekeepers in different areas. Indications are that the yields are

Massachusetts come reports of honey that is light in color and of very good flavor. It seems probable that this disagreement can be explained in part by mixture with honey from other sources, although it may be that the quality does vary under different environmental conditions.

There has been a great difference in the plants which I have observed in different places. With us, it reaches a height of about three feet while in the East I have seen wild plants



larger in the interior than near the Atlantic coast. New York beemen report yields of a super or more per colony, while large yields are reported from some neighborhoods in Ontario and Michigan.

William Dennison reported that one beekeeper in Ontario, who lived near a 500-acre swamp covered with loosestrife, harvested a crop of 260 pounds per colony with a top yield of 750 pounds from his best hive. This is the largest crop to come to our attention although good yields are reported from Michigan neighborhoods.

There is much disagreement about the quality of the honey from purple loosestrife. Some New York beemen say that the honey is dark in color and strong in flavor while from

higher than a man's head. In the West the plants were taller than those growing in Iowa but not as tall as some seen in New York.

C. S. Rowe of Kingston, New York writes us about the purple loosestrife in his vicinity, as follows: "The plant grows best in the low wet ground but also will do well on high ground. The flower has a long purplish spike which blooms for a ten day to two week period. Gives a fair crop of light amber honey and the bees build a good amount of nice white comb at this time. It seems to grow well from Albany to Newburgh on both sides of the Hudson River, including six counties. This plant has two nicknames in this locality: Rebel root and devil weed." — Ed.

Wood Preservatives

and their application

by Dr. E. J. Dyce*



EACH year large quantities of valuable bee equipment are needlessly left to the ravages of the weather and resulting damage from fungi, insects and other organisms. The life of hive-stands, bottom boards and other beekeeping equipment could be greatly prolonged if they were treated with one of the relatively cheap preservatives.

Because of the high price of lumber and the desirability of saving what we have, a number of beekeepers have requested information on available preservatives. The following is a summary of information on wood preservatives contained in pamphlets, circulars and letters secured from several state and federal agencies as well as from the manufacturers of some of the preservatives. Probably other beekeepers will be equally interested.

The best wood preservatives for beekeeping equipment are those which (1) remain in the wood for many years, (2) are most effective against decay and the attack of insects, (3) have the greatest penetrating properties, (4) are safe to handle, (5) are readily available and economical, (6) are harmless to wood and metal, (7) permit painting after treatment when desired, (8) are fire resistant and (9) free from objectionable color or odor. The effectiveness of a preservative depends on the depth to which it penetrates the wood.

Preservatives fall into three main groups: (1) Toxic oils, like creosote which are relatively insoluble in water; (2) Toxic chemicals, like pentachlorophenol and copper naphthenate which are also insoluble in water; and (3) Water soluble salts, such as chromated zinc chloride.

Some of the Best Preservatives

Pentachlorophenol is a relatively new high toxic stable chemical

which is effective against the attacks of fungi and insects. Good penetration is secured without heating the solution if the wood is soaked in the preservative for a few days. This chemical is readily available in concentrated form to be diluted, and also in ready-to-use form. The concentrated solutions are usually cheaper and may be diluted with solvents such as naphtha, mineral spirits, or kerosene, especially if later painting of the wood is desired. If later painting is not desired the concentrates may be diluted with fuel oil or fairly clean used crank case oil. Most of the concentrates are diluted at the rate of about one part of concentrate to about 10 parts of kerosene or fuel oil to make a 5% solution of pentachlorophenol. For best results the wood should be well seasoned and dry, and should be cut to final dimensions before treating. If boring or cutting is later necessary, the exposed surfaces should be treated with at least one heavy application of the preservative.

Pentachlorophenol is about as economical and is as easy to apply as creosote. It is light in color and does not have an objectionable odor. It is sold under various trade names such as Permatox, Wood Life, Wood Tox, etc. Some brands of this preservative contain a water repellent material which should be a definite advantage, especially when it is used to paint the corners of hives, etc., before they are assembled. The amount of preservative used depends on the material in which it is diluted, the length of time the wood remains in the preservative and the porosity of the wood. In general the amount used is comparable with other preservatives such as creosote. There is no indication that pentachlorophenol is more harmful to bees than creosote, but it is recom-

mended that the bottom boards and other hive parts, which come in contact with bees, be piled outdoors and adequately ventilated for at least a week or two to permit the volatile solvents to evaporate.

Coal-Tar Creosote is a by-product of coal tar distillation and ranges from brown to black in color. It is a highly toxic, relatively permanent material and is insoluble in water. It prevents wood decay and the attack of insects and other organisms and is relatively economical and easy to apply. As it ignites rather easily it is more dangerous to use than some of the other preservatives. The treated wood has a pronounced odor and is dark in color. It has good penetrating powers when it is applied under pressure and it has been used more than any other type of preservative. Treated wood which comes in contact with bees should be piled outdoors for a few weeks to permit the volatile solvents to evaporate.

Copper and Zinc Naphthenates

Both these preservatives have considerable merit but since they are sold chiefly in the diluted, ready-to-use form, they are usually a little more costly. Copper naphthenate is the strongest of the two preservatives and leaves a greenish cast while zinc naphthenate is colorless. Both preservatives dry rapidly and can be painted over after about 48 hours of drying. They are insoluble in water and are usually brushed into the wood. They have the important advantage of not giving off poisonous fumes and are considered safe to use on beehives. One gallon applied by brush or spray is said to cover 400 square feet of clean, dry unpainted surface but this will depend on the porosity of the wood.

* Professor of Apiculture, Cornell University

Chromated Zinc Chloride is one of the best water soluble preservatives and is now used extensively in place of zinc chloride. It consists of about 18½ percent of sodium dichromate in a solution of zinc chloride. It is fire resistant, relatively cheap, readily available and clean. The chief objection to this preservative is that it tends to leach out of the treated wood when in contact with moist earth or water. Treated wood should be piled outdoors and ventilated similar to wood treated with creosote and pentachlorophenol.

Some Best Methods of Application Brush or Spray Treatments

While it may be more convenient to apply a preservative by brush or spray these methods are not as effective as the processes later to be described, and they are not recommended for wood which will be in contact with water or soil. If the brush or spray method is used at least two heavy coats should be applied as penetration rarely exceeds 1/16 of an inch with these methods. For rough lumber about 10 gallons of preservative are required to cover 1,000 square feet of surface.

Dipping Process

This method is used with materials such as creosote. The wood is

dipped or allowed to stand in the preservative for a few minutes and when the wood is removed the excess preservative is permitted to drain back into the tank. For best results the preservative should be heated to about 200° F. With this method the preservative rarely penetrates the wood more than 1/8 of an inch on the sides and 2 inches on the ends. Normally from 10 to 15 gallons of preservatives are required to treat 1,000 square feet of surface. The dipping process is usually more effective than brushing or spraying but not as effective as the cold-soaking or pressure methods.

Cold-Soaking Process

This method is recommended for water soluble preservatives like chromated zinc chloride, as well as pentachlorophenol and copper naphthenate which are not soluble in water. Simplicity and moderate cost are the chief advantages of this process. It is adaptable to solutions which cannot be heated with safety. The wood is submerged in the preservative for a period usually ranging from two or three days to a week or more. While shorter periods of time may be used, the effectiveness of the treatment will depend mainly on the length of time the wood is permitted

to soak in the preservative. However, this process is not considered to be as effective as the pressure treatment.

Any water-tight tank of sufficient strength and size to submerge the wood to be treated in the solution is satisfactory. Weights or some device to keep the wood from floating above the surface of the preservative is necessary. An opening at the bottom of the tank to drain off the preservative before or after the wood is removed is desirable.

Hot and Cold Bath Process

This method is the most effective of the nonpressure processes but it requires more equipment and work. The wood is first immersed in a tank of hot preservative for several hours and then quickly immersed in cold preservative and left in it for another period of hours or days before removal.

Pressure Treatment

Treatment of wood in strong tanks equipped for vacuum and high pressures is the best and most rapid method of securing thorough penetration and long durability. The chief disadvantage of this method is the cost of the equipment to do the work.

Our Place in the Conservation Picture

The accent at present in the beekeeping industry seems to be on pollination and the part beekeepers will play in producing.

However, we should not be restricted to such a view, but keep in mind the broader phases of the picture. While the call for more seed production has been due to heavier need for seed and a shortage as a consequence, this in turn has come about by a realization that the heavy call upon our soils must be met by replacement of those elements which are being used up.

Much of the emphasis on the need for more legume seed has come from the efforts of our conservation officials or from individuals who have been for years urging more conservation at the source of the good earth runoff.

Soil conservation does not mean only the planting of more clovers, vetches, etc. on our already tilled areas; it means as well, covering the scars of our past indiscretions to prevent further erosion, and aiding in saving the

adjoining fields. Such marginal lands can be planted to varied plants and shrubs that will help stop soil erosion. It is only with the proper interest and activity of beekeepers that an added use may be made of such marginal lands. Our beekeeping industry is not so much in danger of a dearth of major honey plants as it is of the minor and contributory plants, those which help in the build-up of the colony or which furnish the necessary fall flow. This is doubly the case if we are to be a prime factor in pollination, which usually comes before the major plants are yielding.

If beekeepers were active in boosting nectar yielding plantings on our right-of-ways, roadsides, vacant lands, gullies and ditches, we would have crops from sources little considered at present.

While active participation in farm pollination certainly is part of the beekeeping picture, let us not lose sight of the wider range of service both to ourselves and to allied farm industries in the bigger field of conservation.

The Small Operator



Frank Lucore and his "partners"—his wife and two daughters.

by Frank O. Lucore

MOVING bees for pollination — I do not like it, to say the least, but when the occasion demands, we all seem to do work which we do not enjoy.

So far, all articles that I have read on moving bees in for pollination are based on beekeepers (plural) instead of beekeeper (singular). After experiences the past two seasons, I believe that the beekeeper who can hire help, at least during this migratory season, is the one who will provide most of the actual service to the seed grower. But there must be a lot of us little operators in the country, and we can do our part as well.

I run about 250 colonies, established in six permanent outyards, on a part-time basis. During the past season I averaged 31 hours per week on the job of my part-time work. This, plus traveling time, cut down on daylight hours for working bees, but would have been satisfactory for the bee work in the established yards. It was the added time of preparation and moving for pollination that proved just a little too much to tackle.

At the start of the yellow sweet clover flow, I started grooming colonies to be moved, selecting from the two closest yards. These were to go

in for second cutting alfalfa. Instead of my normal two hive body brood chamber, I put the queen down in number one below an excluder, shortly before time to move. Many of the colonies had built up to four hive bodies, the rest up to three. The colonies to be moved had sealed brood above the excluder with brood and empty frames below for the queen. All had at least eight frames of brood.

As only very strong colonies were to go, I moved during the day (generally after work on the part-time job). I left the extra hive bodies above two on their regular stands for returning field bees, and gave them a frame of young brood in several instances, and sixteen of twenty-seven produced good queens from this experiment.

Loading two hive body colonies in the pickup was no snap. Most of it was done by putting number one and number two on the load separately and uniting them again at the pollination location. By using the excluder, I was safe in splitting them up and putting them together again. Two hive bodies stapled together are too heavy and awkward for a man to handle alone successfully.

The farmer receiving this pollination service is very interested in any-

"Loading two hive body colonies in the pickup was no snap."



thing for the betterment of agriculture, and we arranged for this moving job the fall before it was done with mutual interest in results. But even with this advance notice and preparation, I had plenty of trouble providing 36 colonies when I wanted to get 50 colonies in and out. Sweat and stings! These go together in moving. Then the calls started com-

in Legume Pollination

ing in for 50 colonies — 100 colonies — and from one farmer all of my colonies to be moved in right now! Perhaps the men set up for this type of work can handle no advance notice requests, but I should think not. At any rate, it seems to me that the most important aspects of moving for pollination are plenty of time for preparation and cooperation on the part of the seed grower. I had both.

But to get away from my griping and consider costs — that important item that can break any businessman. The following costs are the result of four years of very close records of operations prior to moving, and moving costs the past two seasons. Basic rate used is that rate which I receive on my part-time work, which makes beekeeping possible. Expenses other than labor or

those which may be definitely earmarked to moving, are prorated on a colony basis considering the portion of time in pollination practice. No initial expense or depreciation on the bees themselves were considered, as I hoped that the divisions left behind would provide sufficient queens, or even colonies if sweetened up with other brood before a Hubam flow.

Average Hours	
General Operation	Per Colony
Unpack and check — includes	
feeding if necessary	0.16
Brood rearing — handle package bees if any used	0.71
Travel incidental to above	0.21
Prepare colonies to move	0.21
Load, travel and move in	0.36
Necessary checking pollination location	0.32

Load, travel and unload — moving out	0.36
Total labor time per colony	2.33
Total labor cost @ \$1.35 per hour	\$3.145
Gas and oil	.086
Depreciation — truck	.144
Depreciation — equipment	.167
Insurance — truck	.054
Insurance — other	.007
Taxes	.090
Rent	.036
Total per colony	\$3.729

Nope — I don't like it. But next year and the next I hope to have improvements made should moving for pollination prove necessary. That is the fun of beekeeping.

Nebraska

1951 Production Guides

The Secretary of Agriculture recently announced national acreage and production guides for 1951 which will have a profound effect on the beekeeping picture in many areas. The highest feasible production levels are being asked for cotton, corn, soybeans, spring-planted wheat, and meat and animal products.

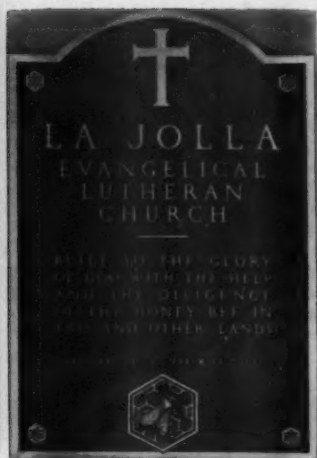
The Department is attempting to do this while maintaining effective rotation systems and other soil improving practices, while continuing its grass program and increasing the productive capacity of ranges and pastures, while expanding the practice of seeding legumes with the small grains to obtain a much wider use of green manure and cover crops, and while accelerating efforts to assure the production of the needed grass, legume and cover-crop seeds. These phases of the program have contributed to a heavy demand for seeds of the better kinds and varieties of legumes.

In particular, the Department is asking for an increase in supplies of Central and Northern Zone alfalfa, Ladino clover, and crimson clover seed, amounting to 126, 148, and 167 per cent, respectively, of the 1950 production.

Supplies of Louisiana and Mississippi white clover seed, and vetch seed are estimated to be sufficient providing growers plant about the same acreage as in 1950. Red clover seed is in ample supply but it is anticipated that consumption will be high due to the scarcity and high price of certified alfalfa seed.

While the report cannot be expected to cover every phase of seed production, it is regrettable that no mention is made of the use of honey bees to increase legume seed production, nor does it establish a goal for the number of colonies needed for pollination purposes—as was done during the last emergency. Can it be that our “fathers” in Washington have been somewhat remiss in looking after the interests of agriculture?

Activities for implementing the production-guides program may include state, district, and local meetings of farmers. It is hoped that in these meetings, honey-bee pollination of more than fifty food and seed crops will find its proper place. Certainly here is an opportunity for the beekeeping industry to “help itself” by telling the importance of bees to our national economy and the present emergency. Let us not be remiss in this.



A Beekeepers' Shrine

by Rev. L. K. Johnson

THOUSANDS of beekeepers in this veritable Canaan's land overflowing with milk and honey will be thrilled to learn that billions of bees from remote parts of the world, flying trillions of miles to mass their product, have supplied enough honey so that the profits from processing and packing it yielded the amount necessary to build a beautiful House of Worship, namely: La Jolla Evangelical Church in La Jolla, California, where Summer is high perpetual and the bees are always busy.

The location is 7100 La Jolla Boulevard, three blocks from the Pacific Ocean. The architecture is Spanish. The type, clerestory, dominated by a ceramic dome and a golden Cross; all indirectly illuminated.

Inside the cloister entrance of the Church, under the clerestory arch, is placed a plaque of bronze, man's most durable temporal memorial. The plaque bears no man's name but is inscribed with a simple statement of fact in words of simple, surpassing beauty. "Built to the Glory of God with the help and the diligence of the honey bee in this and other lands." Underneath this writing are the following Biblical references: Psalms 19: 7-11 and Proverbs 24:13 adding eternal significance to material fashion, for the promise is that not one jot or tittle of it will ever

pass away. At the bottom of the plaque is a bronze bee, artistically cast in characteristic pose.

The bronze plaque was unveiled at the morning service on the day of dedication by Mary Ellen Aeppler of Oconomowoc, Wisconsin, who also turned on the perpetual light, after appropriate ceremony, at the dedication service the afternoon of November 26, 1950, calling the attention of all worshippers and visitors, that man's over all calling is glorifying God. It was also decided upon by the La Jolla congregation that this light will burn perpetually above this plaque as long as this Church stands.

The Bee Motif also appears in carving on the Pulpit and the Lectern.

The bees made music too. The soft buzzing of their industry which produced sweetness for man's bread, provided organ strains to accompany the Bread of Life. The great hymns of the Christian Church, which for centuries have inspired devotion and adoration will find ample expression through the four manual unified organ placed by the help of the harmonious little worker whose honey is mentioned often in the sacred pages of the Holy Bible, the musicians' greatest source of inspiration.

It all came about when Carl Aeppler and his faithful and loving wife, Hazel, cast their lot and future with the bees and their unchanging atti-

tude toward work. Being as true to the bees as the bee is to the blossom, rivaling and even exceeding him betimes in diligence and know-how, they produced honey, packed honey and sold honey until success crowned their industry and enabled them to build the Church and realize the dream that a faithful father in the ministry wanted to fulfill but which long service, age, circumstance and ill health placed beyond his reach.

The State of California, phenomenal in so many ways, was chosen as a fitting place, through a series of circumstances for a Beekeepers' Shrine, but chiefly because of its being the greatest honey producing state in the Union. Its large area, extreme terrain and favored climate offers promise of success to the beekeepers who will honor the rules of diligence and applications of a great science. Perhaps another reason for choosing California and the particular spot La Jolla, is the fact of an old friendship between the families of the honey packer and a former pastor, who is now the pastor of the Church that the bees built.

An invitation goes out to all honey producers everywhere. Come to visit. Come to sit in meditation. Come to worship. Come to use its facilities as a place of meeting. This is a Beekeepers' Shrine. The first of its kind anywhere.

California

Use of Honey During Pregnancy

by D. C. Jarvis, M.D.

IT is sometimes difficult for us to remember that we were all once microscopic specks. It is as a microscopic speck that the individual life of a human being starts. We do not start at birth but instead we start nine months before we come into this world. This speck that is to become a human being becomes it through foods. The human speck requires shelter, steady warmth and the removal of waste products. It is dependent on food. A healthy mother eating healthy foods is necessary for an infant to have a good start.

In 1906, S. M. Babcock planned his famous Wisconsin experiment. Three groups of cattle were fed on complete ripe plants of wheat, corn and oats. The cows fed on corn which is the only one of the three grains of purely American origin did well and their calves were normal. Those fed on oats did moderately well. The cows fed wheat did badly. They became rough coated and gaunt. They produced thin undersized calves that were born two to four weeks too soon.

From this study made on cows it is quite apparent if an expectant mother wishes to have her infant strong and rugged at birth she should not eat foods made from wheat or eat wheat cereals. To do so is to invite disaster. In the light of this study the bread should be corn bread or corn muffins.

Out in the garden one soon learns that it is necessary to furnish nitrogen, phosphorus and potassium to be added to the soil if one hopes to be a successful gardener. The nitrogen is needed for leaf growth. The phosphorus is needed for the production of flowers. The potassium is needed for strength of root and strength of stem. If we leave out one of these three the plant suffers in like proportion. When a fertilizer is purchased one reads the label in order to learn how much nitrogen, phosphorus and potash the fertilizer contains. Likewise, when the expectant mother leaves out one or more of the minerals the infant needs from her daily food intake, it suffers in like proportion in its work of building a body.

If an expectant mother wishes a strong, vigorous infant at birth, wishes to keep her weight within the normal limits of pregnancy, wishes an easy short labor and quick recovery of her strength following her labor, then she should follow a daily food selection that exchanges wheat foods and wheat cereals for rye bread or corn bread. White sugar should be exchanged for honey. Milk as a beverage should be exchanged for cheese because milk forms a curd in the stomach and cheese does not. Muscle meats such as beef, lamb, and pork should be exchanged for fish and other seafood, the internal organs of an animal such as liver, heart, kidneys, and tripe. Two raw vegetable salads and an egg should be taken daily. The vegetable salads represent the leaves of plants which contain needed minerals. An egg has in it everything to make the complete body of a chicken therefore it must be a complete food. Because the liver represents the storehouse of the animal, liver once or twice a week may be eaten if it is acceptable or one or two slices of liverwurst may be taken each day. Fowl occasionally and nuts frequently. She should not take citrus fruits or citrus fruit juices such as oranges and grapefruit. Grape juice, apple juice or cranberry juice should be taken instead. These three are a good source of minerals needed by the developing infant.

An excellent food supplement as well as food is represented by honey. It prevents fermentation in the gastrointestinal tract and is quickly absorbed. The minerals honey contains have important blood-building functions in forming new blood. Having a laxative effect it prevents constipation. In addition, being a body sedative, it helps to produce sound and refreshing sleep at night. Two teaspoonfuls of honey should be taken each meal. This may be used to sweeten food or may be taken direct from the spoon. The honey will enable the developing infant to build a good nervous system that will prevent it from being a fussy baby that does not sleep well.

Nature has spread acid about with a lavish hand in the foods that are the natural product of the soil. In order to be sure to get this needed acid, which is found in fruits, berries and the leaves of plants, one adds one teaspoonful of apple cider vinegar to a glass of water on rising in the morning and drinks the contents of the glass as soon as prepared. This apple cider vinegar and water mixture usually prevents or clears up any morning sickness that may be present. At the midday and evening meal, a glass of either cranberry juice, grape juice or apple juice should be taken. If none of these is available, add one teaspoonful of apple cider vinegar to a glass of water and sip this during the meal.

If an expectant mother follows the program outlined she may expect to find the following present in the infant to which she gives birth.

1. It will have so much hair on its head that it will need a haircut the day it is born.
2. The fingernails will be so long on the day of birth that they too could be cut if necessary.
3. Her baby will have such a strong muscle system that it will raise its head off its pillow of its own accord before it is one week old. As her baby grows she will notice how strong it is and the fine coordination between mind and muscles that exists.
4. She should have plenty of milk which will enable her to nurse her baby if she wishes to do so.
5. Her baby will digest and eliminate as a normal baby should.
6. She will observe that her baby has good width of face as a normal baby should have.
7. Each jaw will be shaped like a horseshoe as it should be shaped which will enable each tooth to appear without being crowded by other teeth. There will be adequate room for each tooth as it appears.
8. And best of all her child will be bright mentally. When the time comes for it to start to school it will be a pleasure for her to observe how well her child does in school.

Vermont

Fruit Pollination

by H. J. Rahmlow

APPLE growers need bees for pollination. That fact has been established by sound research. Dr. R. H. Roberts, of the Horticulture Department, University of Wisconsin, has stated that none of the varieties of apples commonly grown in Wisconsin are self-fertile; each variety requires the pollen from a different variety to be carried to its blossoms for pollination and fertilization.

Delicious Requires Special Attention

One reason why Delicious apple trees do not bear more heavily when

have, by mid-May, as many as 30,000 bees, with a much larger percentage of field bees doing the pollinating. It is also known that after a package of bees from the South is installed in a hive, it will lose as high as 60 percent or more of its population during the three weeks between the first egg laying by the queen and the first emergence of young bees. A package of bees installed two to three weeks before bloom will, therefore, have a greatly reduced population by the time they are needed. It is best to buy large



The fruit grower needs good strong colonies of bees to accomplish pollination and insure fine apples like these.

they have a good bloom is due to lack of proper pollination. It is best to plant only two rows of Delicious trees and then good pollinizers on each side. If an orchard contains a large block of Delicious without adequate pollinizers, good pollinizing varieties such as N.W. Greening can be grafted into the tops of such Delicious trees.

Colony Population

More bees are required for adequate pollination than we have assumed in the past. In some states from two to three colonies of bees are recommended for 100 bearing trees. More than that may be required for varieties such as Delicious. The number of colonies needed to do effective pollination will also depend on the population of the colonies. A two-pound package received from the South will probably not have more than 9,000 bees of which a percentage remains at home to rear brood. An overwintered colony may

packages, such as five pounds of bees and a queen, and install them about three or four days before full bloom.

The fruit grower is confronted with the possibility of having weak colonies provided by the beekeeper. We believe 99 percent of our beekeepers are honest. It is well, however, to guard against those who would divide colonies in order to obtain more money.

To overcome this, (and all honest beekeepers are in favor of a plan which will eliminate any suspicion), we recommend inspection of all colonies and payment on the basis of the strength of each colony.

The Contract

A contract for overwintered colonies should be made providing for a basic sum such as \$3.00 to be paid by the fruit grower for the labor of bringing in the bees and taking them out again. Then the balance of

Apples grown in Wisconsin are not self-fertile. Pollen must be carried to the blossoms for fertilization. (Photo by J. C. Allen & Son.)

the payment should be based upon the bee population in each colony. It can be determined easily by observing the number of frames covered by the bees or the number of frames of brood. It would be advisable to pay a certain amount, such as 50c per frame of brood in the hives. If a colony had 10 frames of brood it would be strong. The price for such a colony, would then, on the basis of 50c per frame, be \$5.00 for the bees, plus \$3.00 for labor or a total of \$8.00. Weaker colonies would cost less, in proportion to their strength. This would encourage the beekeeper to provide strong colonies which are much more effective for pollination than are those with small populations. The prices quoted here of course should be changed according to local conditions and the distance they must be hauled.

The Problem of the Beekeeper

Beekeepers have become concerned about the danger of spray poisoning in the orchard. Many have suffered losses when sufficient care was not taken to avoid poisoning. The time when poisoning is apt to occur is during the "pink" spray before blossoming. Frequently, when this spray is applied, a number of trees will be in bloom or come into bloom if spraying takes several days. The large fruit grower, from the practical standpoint, is unable to omit spraying those trees in bloom in his regular spray program. If he uses arsenate of lead in the "pink" spray, the bees which visit sprayed

Increase Production with Two Queens

by George M. Moffit

ANY system that will bring a colony to the highest possible strength in balanced population for the honeyflow is profitable. And two-queen colonies, provided both queens are good, will do just that if the second queen is introduced early enough. But she has to be there early enough, or there will be an unbalanced hive population. That is, there will be too many young "house bees" in proportion to the field force. That might very easily result in a smaller surplus than with just one good queen. Therefore, results depend on the beekeeper. Contrary to what many authorities claim, two-queen colonies can be worked for section honey as well as for extracted. The main thing is to get that bee population, and then contract the brood space to get the bees into the supers.

At least six weeks before the main flow, get your second queen introduced. From the original queen take all unsealed brood and put it in the second chamber, which you will be using as the third chamber with the two queens. If you have eight combs of capped and emerging brood to leave in the bottom, you're well

away. Put a queen excluder over this chamber and a super on top (a shallow super is best, because you're going to have some lifting, especially with Dadant or Jumbo hives). Put another excluder on the super. This excluder should have a $\frac{1}{8}$ inch strip tacked to the rim on both sides and back end, leaving a good entrance at the front. (I have a special "entrance-excluder" with alighting space in front.) On this put your chamber with the new queen and brood, so that the unsealed brood and any surplus sealed brood that you took from the original queen is put above her in the third chamber. Put a super on top as soon as the bees get crowded.

Once the bees are working in this super, you're all set. For comb honey, as soon as the main flow is on, you take off one chamber, making sure you have the queen in it, and set it on a stand, removing both queen excluders. It's best to give this queen as much emerging and old sealed brood as you can spare, but make sure there is plenty with the main colony. Most of the unsealed brood should be in the second chamber of the main colony, however. The

shallow super from between the two queens should be placed over the new colony for a food chamber. This can be taken to another yard, or moved to a new location in the same yard and have the entrance reduced and closed with grass. You now have a new colony, and a good strong old one that is boiling over with bees of all ages. I have a $\frac{1}{8}$ inch hole below the handhold of every hive body. Many bees will use these all summer, and they're needed after you take away the excluder with the entrance. You can also slide the first super back a bee space for an entrance.

For extracted honey, you can do the same as for comb honey, or just remove the excluders and raise the bottom super to the top. But the first method will mean more surplus, plus a new colony.

If your bees are inclined to swarm, you'd better stick to one queen, because my system means a lot of work if you have to examine them at all. But if it will work with your bees, it certainly will increase production profitably.

Ontario, Canada

trees which are in bloom will be poisoned. Not only are some of the field bees killed, but the "pollen seekers" take to their hives pollen covered with arsenate of lead. This is eaten by the young nurse bees and they continue to die as long as the poisoned pollen is available. Such colonies become unproductive and are a total loss to the beekeeper as far as honey production is concerned.

Bees left in the orchard after the blooming period may also obtain poison from spray on the tree leaves and cover crops. During hot weather bees will seek water on the leaves of trees and grasses. If these are covered with poison the field bees seeking water will die and the colonies become so weak they usually will not survive the following winter.

The fruit grower must learn to understand the problems of the beekeeper and the two must work in harmony and cooperation or both will lose.

Wisconsin

You Can Get Any Kind of Honey

The New York Herald Tribune recently carried an article on honey and its sources, elaborating that Bloomingdale's (one of New York's largest department stores) had honey for sale from 18 different states and 12 separate nations. The honeys came in a variety of fancy containers, from straw skeps to orange bowls, with tastes from mild to full flavored, colors from water-white to dark—and all at fancy prices.

Coincidentally, we are filing in our library a copy of the price list of Andre Prost of New York, a handler of fancy notions. Honey has been one of his items and practically all has been sold in one-pound jars. An examination of the variety which he has to offer reveals honeys of 41 kinds, in addition to many brand names and special blends. These honeys come from 21 of the 48 states and from 17 foreign countries.

We feel sure that Prost's honeys are true to the named floral sources or predominantly so. Thus we have apple, anise hyssop, alfalfa, algaroba, blueberry, buckwheat, bluevine, basswood, catsclaw, clethra, cotton, and many others. Forty-one in all, and all at fancy prices. Pick one out to suit your taste. They're all good honeys!



One of the early honey houses on Molokai, now in ruins after many years of abandonment.

BEEKEEPING in Hawaii is said to have been started in 1857 with the importation of a colony of bees from San Jose, California. In the next fifty years, the number of colonies were increased on the different islands from various sources so that about 600 tons of honey were produced in 1906. In 1918 the Territory shipped 2,432,893 pounds of honey to the mainland. During the next 21 years an average of 1,359,265 pounds of honey were exported to the United States annually. Then the effects of American foulbrood and low prices began to reduce the number of colonies and production until in 1950 the Territory had something less than 10,000 colonies of bees which produced in the neighborhood of 760,000 pounds of honey.

In my recent survey of the beekeeping industry in the Territory, I tried to piece together some of the experiences of the older beekeepers with available records on bee diseases and while many records are still missing, the story is an interesting one especially in connection with the probable development of resistance to American foulbrood.

Dr. Phillips reported in 1909 that the foulbrood diseases of bees were not known to exist in the Hawaiian Islands. I believe that it was on his recommendation that the Board of Commissioners of Agriculture and Forestry of the Territory passed regulations which placed restrictions on the importation of bees and of honey into the Territory to prevent the introduction of infectious diseases. In spite of this regulation, diseases

must have been introduced sometime in the mid-twenties when beekeepers began to experience trouble with diseased brood. Studies of the disease were begun on Kauai in 1926 by the bacteriologist of the Board who later that year determined that American foulbrood was present in two samples examined. In 1932 a majority of the apiaries were inspected on Oahu and several hundred infected hives were burned. No official inspections have been made since that time and the beekeepers reported this year that only an occasional "sick" colony had been found and in each case they were burned. A rather serious loss of bees on Kauai was experienced during the same time, due apparently to American foulbrood.

On the island of Maui, where several thousand colonies were kept in the early thirties, disease became so serious that an inspection in 1935 by Mr. Ambrose, the County Agent, revealed apiaries in which from fifty to one hundred per cent of the colonies were infected. All "sick" colonies were burned, together with the combs and honey and sometimes the entire hives. The disease struck the colonies on Molokai in the early thirties and by 1937 had spread through fifty per cent of the colonies. According to the reports of the Molokai Ranch, Ltd., the infected colonies were burned in that year and the colonies increased to their former number but that in 1938 it was necessary to destroy some 2200 colonies. This left only 240 hives with bees and commercial beekeep-

ing became a thing of the past on Molokai until just within the past year.

The beekeeping industry on the island of Hawaii also suffered losses from American foulbrood but the records are not as clear as with the other islands. Apparently, the colonies on Niihau have never been infected and those on Lanai had but one minor siege.

With this historical background, and without any organized inspection service and with a general laxity in inspection work by many of the beekeepers, one would think that American foulbrood would be widespread throughout the Territory. But this is not the case, although I did find some colonies infected with the disease on Hawaii, Kauai, Maui, and

The Development to A F B

Molokai. In some of the apiaries it was evident that some infected colonies had been robbed out and that drastic measures would have to be employed to eliminate the disease.

There are several factors which have tended to reduce the spread of the disease. Kiawe honey granulates within two or three weeks after it is stored and many super and brood combs are cut out and melted each year. Combs are easier to cut from unwired frames, so a majority of the hives have unwired frames. Unwired combs cannot be moved to central extracting plants without considerable breakage so practically all honey is extracted at the apiary. This practice in itself tends to prevent the spread of disease from one apiary to another. Bees become less excited in robbing out combs of granulated honey and it is possible that fewer

colonies become involved. The ever present wax moth starts to web up the combs, making them less attractive to robber bees, as soon as the colony is unable to protect all of its brood combs and within a few days the brood combs are reduced to frass. The wax worms can make little progress with combs containing granulated honey. The final factor of resistance to the foulbrood apparently is developing in the island bees.

Testing for Resistance

It is difficult to test a colony for resistance without giving it a comb containing a hundred or more infected cells or by feeding it a known amount of spores in honey or sugar syrup and beekeepers are not prone to do this. In 1949 I asked Mr. Luce,

Two daughter queens of the Molokai stock were artificially inseminated with drones from the same stock at Davis and then introduced into artificially infected colonies at Kaunakakai. One of these colonies cleaned up the disease in five combs while another made very little headway against the disease. It was interesting to note that the disease in the one hive was cleaned up with the exception of a few cells within two weeks after the inseminated queen had been introduced. This indicated that the larvae may have inherited immunity to the disease or that the bees in some way were able to clean out the diseased material without contaminating the larvae. The first possibility seems more probable than the last.

Effects of Inbreeding

Very few colonies in Hawaii have been requeened with queens from the mainland during the past twenty years. The present stock is primarily Italian or Italian hybrids on all of the islands but Hawaii and here the black races predominate, although some Italians are present in some of the apiaries. An occasional black colony was encountered on Molokai and Maui. Many of the colonies contained bees with very uniform markings. In several instances the brood was scattered as in colonies showing the effects of inbreeding. In one apiary several colonies had large areas of bald-headed brood, another possible effect of inbreeding. (In such cases the silk glands of the larvae may not be functional.)

The wild swarms on Molokai are

numerous because Mr. Luce captured some 200 such swarms in decoy hives in 1950. None of these or any which have been taken from cliffs, trees, or rolls of mulching paper have ever been found diseased. There are undoubtedly many more wild swarms on this island than are in hives at the present time. The capture of swarms in decoy hives tends to reduce the competition. Many of these swarms resulted from the colonies which remained after the diseased colonies were destroyed in 1937 and 1938 when little attention was given to beekeeping. The stage is set for the development of the resistant factor if no non-resistant strains or lines are introduced from the mainland. The beneficial effects of inbreeding can be increased by the selection of queens from tested colonies for use as breeders in the rearing of queens by controlled methods, and this is in the schedule of the beekeeping work on Molokai. The general burning of infected colonies on Molokai as well as on the other islands may have eliminated many of the susceptible colonies and permitted the less susceptible strains to have greater influence in developing the resistant factor through natural matings.

It is evident, however, that the resistant factor has not developed to the point where the beekeepers can neglect to inspect their colonies for disease in the spring and fall in order to eliminate the few cases of disease found and thus to reduce its spread through robbing or by the transfer of diseased equipment from one hive to another.

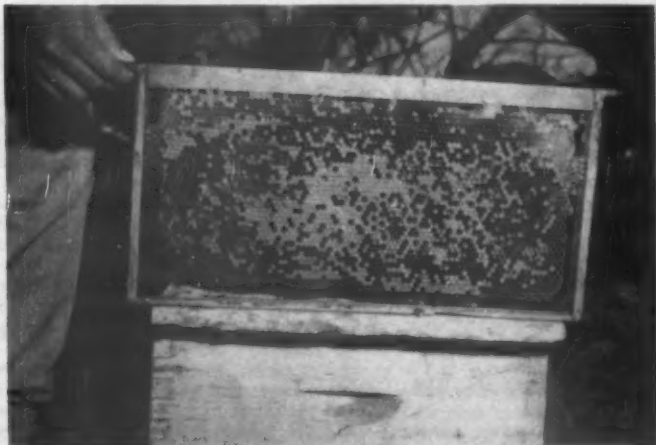
of Resistance in Hawaii

by J. E. Eckert*

apiarist for Molokai Ranch, Ltd., on Molokai, to place a comb containing several hundred scales of larvae killed by American foulbrood in each of two colonies at Kaunakakai. I then brought back to the University of California some queens from Molokai to test the resistance of their colonies in the spring. Dadant & Sons also received some queens for test purposes. After an infected comb had been placed in each colony, the infection generally spread to other combs at first but gradually some of the colonies cleaned out the diseased cells. This was repeated again this fall on a larger scale at Kaunakakai with similar results. Some of the colonies did not make any headway in cleaning up the disease and were helped by being fed sulfathiazole in honey syrup.

* Univ. of Calif., Davis.

Bald-headed brood may be one effect of inbreeding.



Retail and Wholesale Mark-ups for Extracted Honey . . .

Honey was one of many food products put under mark-up controls by three ceiling price regulations, Nos. 14, 15 and 16, issued recently. This is an attempt to explain how the price of honey at various levels of orderly marketing is determined.

Under the general price regulation, effective Jan. 26, 1951, as amended, extracted honey sold at wholesale was exempted from price ceilings. Until such time as the wholesale price for extracted honey reaches the legal minimum (parity in the case of honey), beekeepers are at liberty to get the highest price they can obtain for their crop. Parity for extracted honey at wholesale in all sizes of containers was 18 cents per pound on March 30.

Prices for honey at the packer level were frozen by the regulation, but packers were permitted to adjust their selling prices upward from the base period, December 19, 1950 to January 25, 1951, by the dollar and cents difference between the price paid for current purchase of honey and the highest price paid during the base period. The basis for adjusting their selling prices must be reported to Washington and become effective upon mailing such notification. Thus, if a packer today is paying 2 cents more per pound than the highest price paid by him during the base period, he can add this increase to his selling price.

Under the three new regulations recently issued, wholesalers and retailers first determine the net cost of each unit they sell, based on the invoice covering the most recent delivery of that item to them. Then, on each subsequent Monday morning they recalculate their selling prices, if there has been a price change during the previous week, based on the invoice covering the largest single shipment during that week. According to the group or class into which they fall, according to the regulation, they are permitted specific mark-ups over their net unit cost.

Class 1 wholesalers are retailer-owned cooperatives, provided they are non-profit organizations or controlled by independent retail grocers, and are permitted a 11.5 per cent mark-up. Class 2 wholesalers are of the cash-and-carry type who do not deliver or charge for delivery to in-

dependent retail stores and are permitted a 14 per cent mark-up. Class 3 are those which deliver to independent grocers without charge and are permitted a 19 per cent mark-up. Class 4 includes those selling mostly to industrial, commercial or institutional users and are given a 24 per cent mark-up.

Group 1 and 2 retailers include independent stores whose sales volume in 1950 was less than \$375,000 and a 32 per cent mark-up is allowed. Group 3 and 4 include chain stores who had a volume last year of less than \$375,000 and all stores whose volume was greater than that figure. They are permitted a 31 per cent mark-up.

Assuming that the net unit cost of a 1-pound jar of extracted honey to a Class 2 cash-and-carry wholesaler is 20 cents, we find that the wholesaler is permitted a 14 per cent mark-up, which brings our unit cost for the jar of honey to 22.8 cents.

The wholesaler is permitted to round this figure off to 23 cents. Adding a delivery charge of a half cent we have a net unit cost to the retail grocer amounting to 23.5 cents. The grocer of Group 1 or 2 is permitted a 32 per cent mark-up which figures exactly 31 cents and this becomes the cost to the consumer. Grocers of Group 3 and 4 add 31 per cent which brings the cost to 30.75 cents and he also is permitted to round off the price to 31 cents for the 1-pound jar of extracted honey.

The three regulations cover honey butter and extracted honey, including combinations of extracted and comb honey. Section-comb and cut-comb honey are excluded from the regulation.

Crimson—Ladino—White Clover . . .

The three clovers above are increasing both in acreages and in value of seed produced according to late figures released by the U. S. Department of Agriculture.

There were 90 thousand acres of crimson in 1949; 119 thousand in 1950. Yields per acre decreased, however, from 209 lbs. to 132 lbs. showing that more marginal acres were being planted. A good sign. The per bushel price went up from \$20.00 to \$31.80.

Acres of ladino jumped from 26 thousand in 1949 to 59 thousand in 1950. Again the yields dropped from 140 to 127 pounds. The price also

dropped from \$129.00 to \$123.00, but the overall returns were nearly double in 1950 owing to the larger acreages.

Even white clover grown for seed increased from 29 thousand in 1949 to 40 thousand acres in 1950. Yields increased from 77 lbs. to 80 lbs. to the acre and prices from \$76.00 to \$81.00 a bushel.

It is apparent that the trend towards more legumes for soil building has just begun in earnest and should continue upwards barring calamitous need for foodstuffs.

Bennett's Retirement Postponed . . .

By Executive Order of the President, Hugh H. Bennett, Chief of the Soil Conservation Service of the U. S. Department of Agriculture, was exempted from compulsory retirement on March 31, 1951. President Truman's order states that "in my judgment, the public interest requires that the said person be exempted from such compulsory retirement." With this we heartily agree.

Hugh H. Bennett is one of beekeeping's best friends. He has been Chief of the Soil Conservation Service since 1935. Appearing in person to address the annual meeting of the American Beekeeping Federation in Salt Lake City, in 1948, he stated:

"The opportunities which the beekeeper has for contributing effectively to this program, with much profit to yourself, are many. The soil conservationists appreciate the important influence which your tiny charges can have on this soil conservation program, and stand ready to cooperate with you in every practicable way. There is still time for us to keep our land as a 'land flowing with milk and honey.'

"The continued scarcity of grass and legume seed is seriously delaying the conversion of many acres of continuously and heavily used cropland to needed conservation rotation and permanent cover. Those are the crops in which you bee men are especially interested. As you can see, we need the assistance of your honey bees in this important undertaking, for it is an established fact that without insects to carry out pollination — the most important of which undoubtedly is the honey bee — many plants will not set seed or yield satisfactorily, regardless of cultivation and other care."



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Fill those vacant and weak hives with Berry's producing swarms. We ship annually thousands of packages and queens. We have virtually no complaints as to supercedure, and **ABSOLUTELY NONE** relative to NOSEMA. Having a large number of branch apiaries located in the North Central Western States gives us an excellent opportunity to test our unsurpassed strain for not only honey production, but also for diseases and climatic working ability. In our **CUSTOMERS'** opinions as well as our own, our strain of Italian bees are unsurpassed by any type or kind of bee known, whether hybrid or otherwise. Fifty-six years of **SELECTIVE BREEDING COUNTS**.

Package Bees With Queens and Individual Queen Bees

Quantity	Queens	2-lb. Pkgs.	3-lb. Pkgs.	4-lb. Pkgs.	5-lb. Pkgs.
1 thru 24	\$.90	\$3.00	\$4.00	\$5.00	\$6.00
25 thru 99	.80	2.85	3.85	4.85	5.85
100 up	.70	2.75	3.75	4.75	5.75

(For **BOOSTER** queenless packages deduct price of queen)

All of our queens in our packages, or individual queen orders, are **SELECT QUALITY**. The culs we **DESTROY**. Only queens we would use in our own apiaries do we cage for shipment. Queens' wings clipped **FREE OF CHARGE** on request.

Safe arrival and satisfaction we guarantee on everything we ship, whether packages or queens. All orders filled **PROMPTLY**. We have **NO DISEASE**. A **HEALTH CERTIFICATE** and directions telling how to handle accompany all shipments.

References: The Union Bank & Trust Co., or First National Bank, Montgomery, Alabama. Any bee journal in the U. S. or Canada.

Remember: Thousands of strong colonies and thousands of queen yard nuclei enable us to give you **PROMPT** and **DEPENDABLE SERVICE**.

CAUTION: WE ARE NOT TO BE CONFUSED OR COMPARED IN ANY WAY WITH THE MANY PART-TIME, UNRELIABLE, SMALL BEEKEEPERS WHO ARE CLASSING THEMSELVES AS DEPENDABLE SHIPPERS.

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W. C. Jensen, at left, president of the American Beekeeping Federation, talks matters over with John W. Molsberlein, a past-president of the Federation and one of the hosts of the convention at Denver, Colorado, in January.

Help Us -

As long ago as the days of the ancient Greeks and Romans, man has recognized the principle that a strong foundation is the key to erecting a permanent building. The coliseums and pillared ruins that still stand today testify to their ability to practice this principle.

Today the wise architect plans the foundation for a house just as carefully as he plans the building itself. He knows just how much strain that foundation can carry; he is careful not to over-burden it.

Men still adhere to the time-tested practice of carving statues out of marble. They know that the strength of marble will keep the figures intact through many centuries of wear.

This necessity for a strong foundation bears one simple message: in order for any man-made structure to survive it must be made of stout material and placed on a firm footing.

Other fields of endeavor besides sculpturing and architecture must comply with this code. Any organization in order to withstand the stress of the times must also bear it in mind. Businesses, philanthropic organizations, churches, industries,

small private stores—all must meet this test.

An excellent example the beekeeper has of such a strongly built organization is the American Honey Institute. Here we have a group with the durability to weather out uncertainties in honey marketing and to provide continuous and stable honey promotion.

It gets its strength from its unshakable foundation. The Institute was built up painstakingly by successful businessmen who knew what they were doing. Each new word was incorporated into its charter with the same care and precision the mason uses when he cements bricks together. Each new idea was sifted over and over again to be certain it was worthy of being carried out. And each new business contact was made carefully, and after weeks of patient work.

Today after twenty years of "sifting and winnowing" this strong foundation laid down by the founders of the American Honey Institute has shown its worth. Far from showing signs of wear, the Institute shows constant improvement. The ideas behind the Institute are basi-



Dr. S. W. Edgecombe, at left, Head of the Department of Horticulture, Utah State Agricultural College, and Clarence L. Benson, Phoenix, Arizona, discuss pollination problems as cochairman of the Federation's Honey and Pollen Plants Committee.

Help Yourself

American Honey Institute
Madison 3, Wisconsin

cally good; hence, the organization itself is durable and good.

You remember the old story of the bundle of sticks which could be broken easily one by one, but which could not be broken at all if tied together in a bundle. The Institute binds all the small promotional efforts into one big national effort. It is the only means the beekeeper has of taking his honey out of the small scale, local market and fairly competing on the national level.

We must realize that beekeepers hold the foundation of the American Honey Institute together. Indeed, the Institute is well aware of this fact. The beekeeper, too, must know it. He must realize the important part he has played in making the Institute the success it is today.

It also works vice versa. Not only does the Institute depend on beekeepers for support but beekeepers also depend on the Institute for honey promotion. That is the crucial point; this relationship of the beekeeper and Institute is not a one-way-street sort of affair; rather, it is a partnership, each partner receiving his half of the benefits.

Beekeepers, of course, get their dividends in the form of promotion

for their product. This promotion pops out in newspaper food pages, women's magazines, radio and TV plugs, plus tie-in advertising with other big food companies. Just recently, the thousands of readers of the March issue of Better Homes and Gardens saw a large spread on honey cookery. These things don't happen by accident!

And the Institute gets its share of the partnership from participating beekeepers who send whatever money they are able to keep the Institute machinery in operation.

It is a tribute to the Institute, its leaders, and its past accomplishments that so many beekeepers have voluntarily given so much, so generously.

As in a true partnership, then, each member gives and each member takes. And each member relies on the other.

For its annual drive to sell honey as you put it on the market this summer and fall, the Institute is relying on you to furnish financial support.

In return, you expect to see your honey promoted. And you will! You will not be disappointed!

Northern California ITALIAN PACKAGE BEES AND QUEENS

	1-84	25 or more
2-lb. pkg. w. q.	\$3.75	\$3.50
2-lb. pkg. w. q.	4.55	4.40
	1-10	11-24
Extra queens 1-lb.	1.10	1.00

10% books the order. Balance 10 days before shipping date.

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Prices for May

2-lb. pkg.	\$3.00
2-lb. pkg.	2.80
2-lb. pkg.	4.50
2-lb. pkg.	5.40
Queens	.70

Five packages up, 10% discount.

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After May 15th

2-lb. pkg. with queen	\$2.50	Any
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The following price is effective
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2-lb. pkg. with queen	\$3.00
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Petal, Mississippi

ITALIAN BEES

WITH

YELLOW UNTESTED QUEENS

Health and Live Delivery
Guaranteed

	1 to 9	10 or more
2-lb. w. qn.	\$2.50	\$2.50
2-lb. w. qn.	3.00	3.40

Yellow, Untested Queens for
May Delivery—75c
June 1st—50c Postpaid

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**SAVE ON
HIGH QUALITY ITALIANS
After May 10**

QUEENS
75c each, 10 or more
85c each air mail

Package Bees with Queens

1-lb.	4-lb.	5-lb.
\$2.50	\$4.25	\$5.00
3.85	4.00	4.75

I am in position to make prompt shipment in May. Order direct from this ad.

CARL T. HARPER
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2-lb. package bees with queen	\$2.25
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Queens (postpaid)	.50

Guaranteed full weight and prompt shipping dates. Health certificate with each shipment.

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ITALIAN BEES AND QUEENS

Comparison proves that

Homan's Profit Producing Bees and Queens

will please you from the brood nest to the harvesting of a great crop of honey. Best of quality and gentle, health certificate, full weight, prompt live delivery guaranteed.

Prices through May 15:

Lots of:	Queens	2-lb.	3-lb.	4-lb.
1-24	\$1.10	\$3.50	\$4.50	\$5.75
25-99	1.00	3.25	4.25	5.40
100 up	.90	3.00	4.00	5.00

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CARLOADS AND LESS THAN CARLOADS
Send samples and quote best cash price delivered to us. All grades.

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CANTWELL'S

High Quality Italian Queens

We Select and Breed for
Extra High Production

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Deduct 25% for delivery after
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Live delivery and satisfaction
guaranteed.

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**TRY THE
BEEKEEPERS MAGAZINE**

Introductory Offer—Six Months \$1.00
Single Copy Current Issue 25c

LANSING 17-B, MICH.

Fourteenth Year of Publication

This is the Month

by Frank E. McLaughlin

MAY—a month full of anticipation and promise to the beekeeper. It is a busy month around my place as it is with all beekeepers.

Before the Honeyflow

Our bees started raising brood very early this spring. Really too much brood for so early in the season, making it very probable that the swarming season will start early. I don't know what other beekeepers will be doing in May, but I have a good idea. I know I will be very busy checking my bees, trying to build them up for the honeyflow ahead, and trying to keep them from swarming.

When bees are permitted to swarm, no surplus honey can be expected for that season as the majority of the field bees go out with the swarm just when they are needed most.

Around the first of this month I will be requeening the colonies I had marked last fall for new queens. We had one winter loss which is already replaced by one of my overwintered nuclei.

My queen rearing yard is being put into shape and new nuclei are being started from the parent colony I keep for that purpose.

In May, supers are given a final once-over to see if they are all in readiness for what we hope to be a good honeyflow later. Indications are very favorable for a good honeyflow in our location this year.

Fruit bloom, which generally ends this month, provides a good supply of nectar and pollen for the bees. The colonies' gain in strength becomes noticeable. When colonies are really strong, full entrance can be given, but if the colonies are rather weak the entrances should be kept reduced. Thinking back to my beginner days, I realize it is very easy for a novice to mistake an average colony for a strong one. A really powerful colony is one that has so many bees you can't see how they all

get in the hive. Every frame should be covered with bees.

Check the colonies to see if the queens are laying full combs of brood. If the brood is found to be in small patches, the colony should be requeened as quickly as possible during fruit bloom so the new queen has a chance to build up the population.

When inspecting colonies, do not look for just one thing. There are many things to observe: the amount of stores, the queen, the amount of brood, condition of the brood, indications of disease, wax moth runs, and cleanliness. All of this is caught at a glance by an experienced beekeeper as he goes through his colonies. To a beginner, this may sound like a lot, but it will all come easy for him as he gains experience in handling bees.

Between the end of the fruit bloom and the major honeyflow, there is what is called a dearth of nectar. That is when little or no honey is coming in. Some colonies may need feeding to tide them over until the honeyflow. Be sure to inspect them frequently for this purpose.

The location of the bee yard should be given consideration. There must be good bee pasture if a surplus of honey is expected. Plants that secrete nectar should be available in large quantities.

Hiving Packages

A number of my readers will be getting package bees and some of them will be having their first experience in hiving them. There are several methods of installing packages. One method, which is used by many beekeepers, is as follows:

First, sprinkle the package of bees with warm water or thin warm sugar sirup. Put five frames in one side of an empty hive. Pry up and remove the square piece of wood covering the feeder can in the package to be hived. Remove the feeder can, and replace the piece of wood over the hole.

Now carefully remove the queen cage. Remove the cardboard from the candy end of the cage and hang the cage, candy end down, between the second and third frames in the hive. Wrap the end of loose wire around a tack driven into the top of the frame. Leave these two frames separated. Jar the bees to the bottom of the package. Pour half of the bees between the frames where the queen cage is hung. Carefully push the frames together. Shake what bees you can on top of the five frames in the hive. Place the package in the empty side of the hive, open side up, so the bees left in the package can crawl out. Close up the hive and put the feeder on. About two weeks later the package can be removed and the other five frames put in the hive. An inspection can also be made to determine if the queen was released and is laying.

The method I use is practically the same with the exception of leaving the package in the hive for a few days. I always shake all of the bees out of the package. I put all ten of the frames in, close up, and put on the feeder. This prevents the bees from drawing any spur comb around the package.

Bees may be fed by using a Boardman feeder (an inverted fruit jar with a perforated top) which slips into the entrance, or a friction top can with small holes in the lid which is inverted over the hole in the inner cover. An empty super is placed on top of the hive when the latter is used, to protect the sirup can.

It is very important to feed package bees continuously until enough natural nectar is available. If bees are hived on foundation, they need the sirup for food, and will also need it for building comb on the foundation. Bees only build comb when nectar is coming in or when they are being fed.

We greatly enjoy G. H. Cale's column "All Around the Bee Yard" in this journal. His keen knowledge of bees, their habits, and how to handle them is remarkable. I always enjoy visits with Mr. Cale and our talks on different phases of beekeeping.

I appreciate receiving so many nice letters from beekeepers and having the privilege of helping with their bee problems. Write me in care of American Bee Journal.

ITALIAN BEES AND QUEENS

For Quality and Service — Shipped When You Want Them.

Quantity	Queens	2-lb. with Queens	3-lb. with Queens
1-24	\$1.15	\$3.50	\$4.50
25-99	1.00	3.25	4.25
100 up	.90	3.00	4.00

HOMAN BROTHERS

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Shannon, Miss.

BESSONET'S "GULF BREEZE" ITALIANS

You will be pleased with "GULF BREEZE" stock, as THE DEMAND grows each year. Experiment stations, large and small buyers use our stock with satisfaction.

Quantity	Queens	2-lb. Pkgs. With Queens	3-lb. Pkgs. With Queens	4-lb. Pkgs. With Queens
1-24	\$1.15	\$3.25	\$4.25	\$5.25
25 up	1.00	3.00	4.00	5.00

Write for prices for shipment after May 15th.

BESSONET BEE COMPANY, Donaldsonville, Louisiana

PACKAGE BEES AND QUEENS

"ITALIANS"

Quantity	Queens	2-lb. Pkgs. With Queens	3-lb. Pkgs. With Queens	4-lb. Pkgs. With Queens	5-lb. Pkgs. With Queens
1-24	\$1.15	\$3.25	\$4.25	\$5.25	\$6.25
25 up	1.00	3.00	4.00	5.00	6.00

We guarantee live delivery, a health certificate with each shipment and service on which you can depend. Shipments by Express or Parcel Post.

Quality Does Not Cost — It Pays!

THE WILBANKS APIARIES

Claxton, Georgia

PLANT'S THREE-BANDED ITALIANS

Productive, Gentle, Easy to Handle

Queens are young, laying and first quality. New, light weight packages. No disease here, health certificate with all shipments. Live, full weight arrival of young worker bees.

Quantity	Queens	2-lbs.	3-lbs.	4-lbs.	5-lbs.
1 to 24	\$1.25	\$3.50	\$4.50	\$5.50	\$6.50
25 to 99	1.15	3.25	4.25	5.25	6.25
100 up	1.10	3.00	4.00	5.00	6.00

Each package has a young laying queen. Queens are postpaid. Packages by express F.O.B. For shipment after May 15th, deduct 20%.

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Hattiesburg

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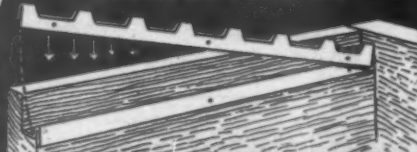
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Now used everywhere as essential equipment. Sixteen styles to fit any standard frame. Write for details, prices.



STOLLER *Honey Farms*

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GOLDEN ITALIAN QUEENS

Prices after May 10

2-lbs. with queen	\$2.50
3-lbs. with queen	3.50
Queens, each	.70

WE GUARANTEE—
Health certificate
and live delivery.

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CAUCASIANS, CARNIOLANS

Hardy, prolific, rapid build-up, best of workers. Caucasians have the longest tongues of any race. Both build beautiful white combs. **GENTLEST OF ALL RACES OF BEES.** Gentleness saves time, sweat, patience and work. Untested queens from our Florida yards. \$1.50 each. Order here but mailed from Florida, Air Mail. New Jersey reared queens ready May 25, \$1.00 ea. Air Mail. A few packages yet. Ask. Over 30 years a queen breeder.

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YELLOW

ITALIAN BEES AND QUEENS

2-lb. with queen	\$2.50
3-lb. with queen	3.50
Queens	.70 each

Live delivery and health certificate guaranteed.

OSCAR ARNOUVILLE

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ITALIAN BEES AND QUEENS

	1-9	10-Up
2-lb. pkg. w. q.	\$2.50	\$2.40
3-lb. pkg. w. q.	3.45	3.35
Queens	.75	.65

MITCHELL'S APIARIES

Bunkie, Louisiana

Italian Package Bees and Queens

Satisfaction Guaranteed

PRICES	1-25	26 or more
2-lb. pkg. w. queen	\$2.75	10%
3-lb. pkg. w. queen	3.50	discount
4-lb. pkg. w. queen	4.25	

Deduct \$1.00 for queenless packages.

DAIGREPOINT APIARIES

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1951 QUEENS

TESTED	Young	UNTESTED
\$1.25	Laying	\$1.00
	3-Banded Italian	

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Box 341, Farmersville, Texas

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Thousands of Rabbits and other Small Stock. Poultry and Birds. Let

Standard Rabbit & Pet Journal

Bring you the Monthly News of Rabbit, Cavy, Small Stock, Poultry, Birds and Other Pets.

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Are You Losing Beeswax

We render old combs, cappings, and slungum for beekeepers. Our steam wax presses get every available ounce of wax out of this material. Send for terms.

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You Asked Us - -



A colony that I hived last June has filled its two hive bodies with wax, propolizing so badly that it is impossible to pry them apart. How can I get the bees into a new hive? Would it work to place a third hive body filled with foundation over the other two?

Frank W. Dick, Jr., Minnesota.

Perhaps the bees have made such a mess of their hive because you did not have your foundation installed and imbedded properly and some of it came loose. The bees may also have become crowded and drew comb in all fashions. You should inspect your bees more often, at least every ten days during the working season. Super them when needed and scrape the spur comb and propolis from the frames and hive bodies when inspecting.

You should be able to pry the two hive bodies apart by loosening them at the corners with a hive tool. Placing a third body of foundation on top will not help. It would be better to set the colony aside, put a clean bottom board and hive body on the old stand, install clean frames and foundation or the old frames if some are usable, and shake the bees into this new hive. Be sure to watch for the queen, and if she is lost give the colony a new one. Feed the colony until nectar is coming in. The wax from the old hive can be melted and the hive scraped and cleaned for future use.

Can I move my hives to a new location on my farm during the winter, or will they return to the old site after their first flight in spring?

Fred Harmor, New Jersey.

If you want to move your hives during cold weather to a new place it is all right to do so. Lean wide boards up in front of each one so that when a flight day comes they will notice their new place and return to it.

Should I put Caucasians in the same yard with Italians?

M. H. Smith, Wisconsin.

As long as queens are not superseded, there is nothing about this which would not be perfectly satisfactory. However, upon superseding, you would get a mixed bee. Sometimes they are cross and sometimes they are as gentle as the originals. Oftentimes they are bad at swarming but usually they are fair in production. If you requeen frequently so that the queens of either race are introduced by you, there is less trouble than otherwise.

What can be done to prevent hives from forming large and numerous water blisters under the surface of the paint in winter and spring. Should the hive be painted inside?

C. C. Parkinson, Virginia

Lumber today is not thoroughly dry and when it is painted, very often the moisture in the wood comes through to the outer surface when the hives are outdoors with bees in them, because of the heat not only from the bees, but also from the temperature which continues to dry out the wood. Also paints today are often not as good as formerly. The best paint is a good white lead paint and linseed oil rather than some of the ready mixed preparations obtainable. If a good primer paint is used on the hive and allowed to dry thoroughly, even if the hive is in use, before the final coat of white is applied, there will be less blistering. Do not paint hives on the inside.

What is a tested queen and what specifications must it pass?

Francis Pawlitschek, Minnesota

Tested queens are queens that have been tested to see if their eggs are fertile, and if they lay solid frames of brood. If tested queens are purchased, you may be sure you are getting a queen that has proved her ability, while with untested queens you must take a chance.

This winter I lost one hive. The top of the frames are covered with brown stuff. What caused the colony to die and would it be safe to use the hive again?

R. J. Sinn, Iowa.

The colony probably had dysentery. When bees have dysentery they will leave their discharge in the hive if they cannot make a flight. This accounts for the brown substance on top of the frames. Possibly the honey in the hive was not completely cured or had started to ferment. Some believe that is one cause of dysentery. There could have been Nosema disease in the colony also. The equipment should be scraped, cleaned and boiled in a solution of household lye and water for 15 minutes, then rinsed in clear water and allowed to dry before it is used again. Do not use any honey that was left in the hive.

Last year I bought ten colonies of bees and gave them plenty of supers during the season but they all swarmed two or three times. Do you think it was the strain of bees or what?

Harold Doore, Iowa

There may have been old queens in the hives. This would increase the inclination to swarm. Possibly if you had introduced young queens when you purchased the bees there would have been less swarming. Granted, some strains of bees are more inclined to swarm than others. But swarming can be controlled to a great extent. If the brood nest is congested, that is, filled with brood and honey so that the queen has no more room to lay, piling on supers will do no good. One method is to Demaree, or relieve the congestion in the brood nest by taking out all but one or two frames of eggs and unsealed brood and moving them up into the super above a queen excluder. Leave the queen below in the brood nest and fill the empty space with frames of drawn comb. This gives the queen room to lay again. If you use this plan, inspect the colonies again in about a week to destroy queen cells on the frames of brood above the queen excluder. There are also several other good methods of swarm control. Using a queen trap to stop swarming is not a good idea as it causes a congested condition at the entrance and may block out field bees returning loaded with honey.

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QUALITY at LOW COST
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KELLEY—"The Bee Man"

2-LB. SWARMS WITH YOUNG QUEENS	\$3.50
25 OR MORE 2-LB. SWARMS	3.25
2-LB. SWARMS WITH YOUNG QUEENS	4.50
24 OR MORE 2-LB. SWARMS	4.25
QUEENS (PREPAID AIRMAIL), EACH	1.10

THE WALTER T. KELLEY CO. Box 210, Paducah, Ky.

B E E S

Three-Banded Italian bees with Improved Hybrid queens of Kelleys Island stock. Shipments start April 1. Express or parcel post shipment.

WHY WORRY?

When you can get Merrill's Quality Bees and Queens at these prices with 100% Satisfaction.

2-lb. Packages with queens	\$3.00
3-lb. Packages with queens	4.00 Any number
Improved D. K. Queens Untested	1.00
Tested queens	2.00

10% discount after May 30th.

Our 30th year as shippers of bees and queens.

MERRILL BEE COMPANY

State Line, Mississippi

Italians

SUNKIST

Italians

Top quality with full guarantees. Get on our list of satisfied customers. Prices: Until May 15 After May 15

	1-24	24-50	50-up	
2-lb. w/queen	\$3.25	\$3.00	\$2.75	\$2.50
3-lb. w/queen	4.25	4.00	3.75	3.40
4-lb. w/queen	5.25	5.00	4.75	4.30
Queens	1.00	0.90	0.80	0.65

SUNKIST BEE COMPANY

Convent, Louisiana

HOWARD WEAVER'S Caucasian Package Bees & Queens

	Queens	Queens after May 30th	2-lb. Pkg. W. Q.	3-lb. Pkg. W. Q.
1-24	\$1.50	\$1.00	\$2.50	\$4.50
25-49	1.10	.80	3.25	4.25
50 & up	1.00	.50	3.00	4.00

Package bees are express collect; but on small orders parcel post effects considerable saving over express charges. I will be glad to figure your parcel post charges for you.

HOWARD WEAVER

Navasota, Texas

BETTER BRED QUEENS

THREE-BANDED ITALIANS

Frame after frame of smooth, even brood; super after super of honey; gentle bees; swarming cut to minimum. This is what you get when buying our Better Bred Stock. Order direct from this ad at the following prices:

2-lb. package with queen, any quantity	\$2.70
2-lb. package with queen, any quantity	3.00
Queens, each	.85

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Calvert

Alabama

JENSEN'S QUALITY BEES AND QUEENS PLUS SERVICE

Our aim is to make you a satisfied customer. Failure to do this we both lose. Prices effective April 1. For shipment as soon thereafter as weather will permit, and good queens become available from our queen yards. Remember—everything depends on the quality of the queens.



Packages:	2-lb. W/Qs	3-lb. W/Qs	For Dadant's Starline Hy- brid Queens add 25c per Package.
1-24	\$3.50	\$4.50	
25-99	3.25	4.25	
100-up	3.00	4.00	

F.O.B. here via Express, Parcel Post, or loaded your trucks.

	"Magnolia State" Italians	Dadant's Starline Hybrids
Queens		
1-24	\$1.25	\$1.50
25-99	1.15	1.40
100-499	1.10	1.35
500-up	1.00	1.25

Queens clipped and marked free.



Jensen's Apiaries, Macon, Miss.

"The Business Quality and Service Built."

A GOOD INVESTMENT INSURES GREATER PROFITS

An investment of one cent will bring to you our 1951 catalog. Compare prices and merchandise before you invest in additional supplies for your apiary or honey house.

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All manufactured in our plant here in Marshfield. Made from select materials, and good workmanship together with prompt service to make your investment a wise one.

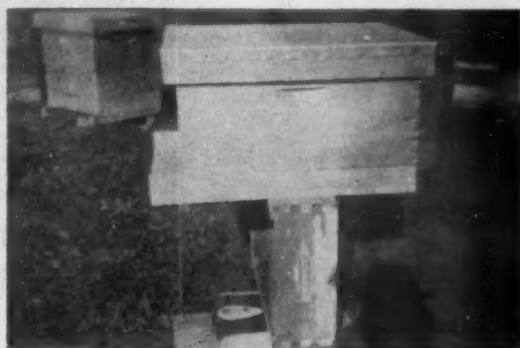
MARSHFIELD MFG. CO.

(INC.)

(Heart of Wisconsin's Dairyland)

MARSHFIELD, WISCONSIN

How-to-do-it



Bathroom Scales for Weighing

We had occasion to buy a couple of hives of bees in the fall and we wanted to weigh them to get a more accurate idea of the amount of stores. Having nothing but a bathroom scales we leveled the scales on a board. Then we took a shallow super shell, turned it on its side and placed it on the scales. The hive was then placed on the super as shown. This raised the hive high enough off the scales so it could be read.

W. E. Grossman
Ohio

Hive Painting

Recent numbers of the Journal have mentioned hive painting and as many think white should be the color, I painted most of my hives white in my first 15 or 20 years of beekeeping. On a hot day in one of the late years, three white hives had combs melted down. A year or so after that I had the chance to buy four box-hives. One of these was painted white and when I started to transfer it to a frame hive I found that sometime ago the combs had fallen down from heat.

About forty years ago I began beekeeping on a large scale and made my own hives. I did not paint the hives but covered them with black roofing felt. In all my 40 years of use of those hives I never had any melting down of combs. Seeking to explain this I came to this conclusion—white reflects heat but does not radiate it much. Black absorbs heat but radiates it rapidly. The white hive heats gradually but cools off slowly. The side of the black hive hit by the sun gets hot quickly, but the sides which the sun does not strike radiate the heat so rapidly that those sides cool the hive.

My black hives have wintered my bees satisfactorily. On two different winters 75% of the colonies in the New England States perished. I lost none.

Instead of painting wooden hives it is well to coat them with some good wood preservative such as carbosol or similar preservative. This prevents rot and the work of termites.

Allen Latham, Connecticut

American Bee Journal



Bee Tree

Illustrated here is a method for taking bees from a tree. A hive with combs or foundation and two frames of brood and queen is placed near the colony in the tree and a wire cone over the hive entrance extends to the tree. On finding that they cannot get back into the tree, the bees accept the hive as their new home. Where adaptable, this device saves cutting into the tree or house where the bees are lodged.

Take Care of Those Cans

When packing honey in tin pails or 60-pound cans one often finds some of these tin containers which have small rust spots upon them. Give these spots a good rubbing with steel wool, fine grade, and these spots disappear. Finger marks, small spots of wax, propolis, etc. may be quickly cleaned off by using steel wool. Wash off the can with clear gasoline, place the honey label in place with glue, and then wipe tin can with a rag moistened with kerosene. This prevents the tin from any further rusting and cans may be stored until needed for sale.

After 60-pound cans have been emptied, washed out with hot water and rinsed for several times to remove every trace of honey, one can insert a 10-watt light bulb in the can and in a short time the can will be perfectly dry. When dry, the caps should be screwed on so no dust or other foreign matter can enter. Clean up with steel wool and give a light coat of kerosene to prevent rust.

E. F. Bea, Minnesota

PACKAGE BEES AND QUEENS



DADANT'S STARLINE HYBRIDS

and MY OWN STRAIN OF ITALIANS

Italians

Queens	1-24	25-99
2-lb. pkg. w. q.	\$1.20	\$1.10
3-lb. pkg. w. q.	3.50	3.25
	4.25	4.00

Starline Hybrids

Queens	1-24	25-99
2-lb. pkg. w. q.	\$1.45	\$1.35
3-lb. pkg. w. q.	3.75	3.50
	4.50	4.25

Reduction in prices after May 20:

10c on queens and 50c on packages with queens.

All queens reared in strong three-frame nuclei (standard frames). All are well developed.

Queens postpaid, airmail if it saves time. Packages by express or truck. Let me figure with you on loading out your truck with packages that will please you.

Rev. Father Clement Nordus of St. Benedict's Abbey, Atchison, Kans., writes, "Your packages are all that I could expect; they have done well for me."

Try them and be convinced that they will do for you what they have for many others.

Only a few choice shipping dates left
so rush in your order today!

S. J. Head Crosssett, Arkansas

YORK'S

PACKAGE BEES AND QUEENS

QUALITY BRED ITALIANS

The Strain Preferred by Leading Honey Producers

Plenty of bees for those rush and last minute orders. Place your orders now for shipping date wanted. Full weights and quality that will please you.

Package Bees With Queens

Quantity	1 to 24	25 to 99	100 up
2-lb. Pkgs. ---	\$3.50 each	\$3.25 each	\$3.00 each
3-lb. Pkgs. ---	4.50 each	4.25 each	4.00 each
Queens -----	1.10 each	1.05 each	1.00 each

Queenless packages deduct \$1.00 per package.

Tested Queens \$1.00 Extra

Yours for service and satisfaction

Place orders now for shipping
dates wanted.

YORK BEE COMPANY

Jesup, Georgia, U. S. A.

(The Universal Apiaries)

QUALITY BRED ITALIANS — Queens and Packages
 Productive, gentle, easy to handle. Live delivery guaranteed on all shipments.
 10% deposit books any order.

2-lb. pkg. with queen	\$2.75	4-lb. pkg. with queen	\$4.75
3-lb. pkg. with queen	3.75	Queens	85c each

Write for discount on orders over 50 packages.

SPEARS' APIARIES —:— **Hamburg, Louisiana**

CAUCASIANS UNLIMITED
 Unlimited in Quality — Unlimited in Quantity

Queens of unlimited quality for delivery in 1951 at no increase in prices. Please order early.

\$1.00 each **\$90.00 per hundred**

Probably the largest producer of Caucasians exclusively.

THOS. S. DAVIS
 Route 7, Box 3914 **Sacramento, California**

ITALIAN PACKAGE BEES AND QUEENS
 Service—Satisfaction—Health Certificate and Live Delivery Guaranteed.

2-lb. bees with queen	\$3.00	4-lb. bees with queen	\$4.50
3-lb. bees with queen	3.50	5-lb. bees with queen	5.40
Queens			\$1.00

B. J. BORDELON APIARIES **Moreauville, La.**



NEW
 Control Box Model of the Macy
 Electric Uncapping Knife
 Ask for No. 108 Model—Price \$15.00
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● **QUEENS—PACKAGE BEES FOR 1951** ●

ESTABLISHED 1883

Maximum production is most easily assured with superior bees and queens. That's one way we try to help you make money. Superior bees and queens is our motto at all times. We like to have 50 per cent deposit and balance before shipping date. We believe this is fair to all—as we like to plan and ship the day you want shipment. Price scale:

Queens, any number	\$1.00—Tested Queens	\$2.00
2-lb. package and queen		\$3.00 any number
3-lb. package and queen		4.00 any number

THE VICTOR APIARIES **Uvalde, Texas**

LOOK HERE!

Bees and Queens in Line With Honey Prices.

2-lb. pkg. with queen	\$2.45	4-lb. pkg. with queen	\$4.45
3-lb. pkg. with queen	3.45	Queens postpaid	.65

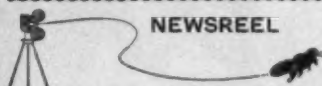
In lots of 100 or more write for price.

GULF COAST BEE CO. —:— **Schriever, La.**

THE HEART OF COMB HONEY IS FOUNDATION

The biting quality of the honey, that delicate center taste is foundation. It must become a part of the honey, so tender, a touch of the tongue will crumble it; yet be so strong, that bees work it out quickly and easily. Dadant's Surplus Foundation, fragrant and pure, thin and sweet blends so naturally with your finest comb honey, that your market grades are better and sales are quicker.

DADANT & SONS, Inc., Hamilton, Illinois



Moving Soon? . . .

To make sure of receiving your copy of **AMERICAN BEE JOURNAL** promptly, please send advance notice of your change of address directly to us.

At least four weeks before change takes effect let us know:

1. Date you are moving.
2. Old address.
3. New address.

Clip the old mailing label from your **AMERICAN BEE JOURNAL** and send it in with your change of address to **AMERICAN BEE JOURNAL, Hamilton, Illinois.**

It's possible to have your mailing address corrected by filing your new address with the Post Office, which in turn will notify us. But if a copy of the magazine is sent before that notice reaches us, it means expense in forwarding postage.

New Book on Beeswax . . .

Huber H. Root is the author of a new book on beeswax published by the Chemical Publishing Co., 26 Court St., Brooklyn, N.Y. This volume of 145 pages sells for \$4.75.

A survey of the beeswax industry, the book contains material on the origin and value of beeswax, its uses, its clarification and bleaching, and data on the possible future of this product of the hive.

Foreign Honey in Britain . . .

Large imports of honey are coming into England mostly from Australia and New Zealand. British beekeepers through their journals have been remonstrating that such honey at least be labeled with the country of origin, so that the native honey might have that advantage in advertising.

Meanwhile, little if any Canadian honey reaches British markets. Apparently Canadian dollars are as hard to get as U.S.

Marshall E. Fuller Passes . . .

We regret to announce the death of Marshall E. Fuller of Sharksville, Tipton County, Indiana. Mr. Fuller died March 16, 1951 at the age of sixty-nine. He had spent thirty years among the bees and his greatest enjoyment was working with them.

Radio Quiz

Herbert Haut, a Utah beekeeper, claiming ownership of 800 colonies of bees, appeared on the Groucho Marx Bet-Your-Life radio program of February 14. Paired with a lady wedding director they ran their initial \$20.00 up to \$236.00 on the four questions asked, which gave them a chance at the \$2000.00 jackpot question. However, they missed on the name of the man who was the opponent of James Madison for President whose picture is seen daily by millions on cigarette packages. Dewitt Clinton, on the tax stamp, was the correct answer.

As between the two professions, beekeeper or wedding director, Groucho said he believed he would "rather take the hives."

New Honey Flavors . . .

Some plants which are classed as unimportant by beekeepers, are very helpful in filling supers with surplus. Some popular honey flavors might result if closer attention were paid these plants.

Of the varieties of fruit bloom—pear, peach, wild plum and wild cherry are rarely gathered as surplus; yet if they were worked in quantity with the help of rebud the resulting blend would be honey of amber color and slightly dense body with a fine flavor. How about advertising Fruit Bloom Honey?

Other possibilities are dewberries, blackberries, field honeysuckle and hop clover, horehound, watercress and wisteria. Most types of plants in any locality should be considered. Some may prove more valuable than the usual well known varieties.

Carl M. Teasley, Tennessee

The Changing Nectar Picture

Once mesquite was the banner honey of Texas and the southwest. It still figures in the honey picture, but its days are evidently numbered. The "Sheep and Goat Raiser" magazine (San Angelo, Tex.) in its February number has an extended illustrated article on best methods of ridding the pasture lands of mesquite. The mesquite is not easily killed and new sprouts spring up for several years before destruction is complete. But sprays are accomplishing the job, so that another honey plant is leaving the picture, probably to be replaced by grasses and legumes which may be worth more to the beekeeper.

Bulletin on Beeswax Rendering

The Department of Agriculture of Tanganyika Territory (Southeast Africa) has published a bulletin, pamphlet 49, by its beeswax officer, F. G. Smith, on "Modern Methods of Rendering Beeswax."

The 24-page pamphlet gives several of the various methods including the sun extractor, home methods, the Herscher and German wax press, and the Brand cappings melter. It is from Tanganyika and its neighboring provinces that much beeswax is gathered from the wild bees of the timber to find its way into the markets of the world.

Grow More Legume Seed With Pollinating Insects . . .

An interesting little leaflet with this title has been going the rounds among farmers since it was published by the USDA Upper Mississippi Region Conservation Service last June. It tells the farmer simply why pollinating insects are needed and how they increase crops of legume seed. One side of the folder suggests the use of honey bees if wild bees are scarce and advises the farmer who doesn't want to be a beekeeper to make arrangements with a local beekeeper for the services of his bees. It is good advice and understandable to the farmer.

Interfeeding . . .

"L'Apiculture Lorrain" quotes from "Apicoltore d'Italia" experiments carried on by the Russians at their experiment station at Tula. Colonies whose workers had long tongues and others with short tongues were observed. Two combs were interchanged so that the workers with long tongues fed the eggs and larvae from the short-tongued bees, and vice versa. The larvae from the short-tongued colony matured with long tongues, and those fed by short-tongued bees became short-tongued adults. Did this result from association, food, or what?

Migrating Bees in India . . .

H. Vishwanathan in the Indian Bee Journal reports that their smaller native bee "apis indica" is an all-round native in the vicinity of Mt. Abu. On the contrary, the larger bee "apis dorsata" is found in fewer numbers since its colonies migrate with the season and are seldom domesticated.



John M. Davis Strain

ITALIAN QUEENS
1-24 34 up
1-25 31.50
DAUGHTERS OF A.B.A.
TESTED STOCK
1-24 34 up
1-25 31.50

LITTLE APIARIES
Shelbyville, Tenn. P. O. Box 123

THRIFTY QUEENS

3-Banded Italians Only

Prices are for delivery May 15th or later and include a queen.

Two-pound packages in lots of 1 to 24—\$3.00; 25 to 99—\$2.50; 100—\$1.90 each. For larger packages add 75c for each additional pound of bees.

Queens postpaid, 1 to 24—50c; 25 to 99—40c; 100—70c each.

We guarantee live delivery and full weight packages of young, **THRIFTY** bees.

W. J. FOREHAND & SONS

FORT DEPOSIT, ALABAMA
Breeders Since 1892

GOOD NEWS AGAIN:

Our bees and queens are cheap, in price, but are high in quality. We are trying to keep our prices in line with transportation charges and the low price of honey.

Three-Banded Italian Bees and Queens

2-lb. pkg. with queen \$2.45
2-lb. pkg. with queen 3.35
ITALIAN QUEENS75

For queenless package deduct price of queen. Fast service—Live delivery guaranteed.

LUCEDALE APIARIES
LUCEDALE, MISSISSIPPI

Allen Latham's BEE BOOK

The first and only book ever written by the great master of beekeeping, published December, 1940. 500 pages, 27 chapters. Randomly bound in cloth and sent to you postpaid in special protective container.

\$2.95 Postpaid

HALE PUBLISHING COMPANY
Naperville, Georgia

PALMETTO QUALITY QUEENS

Be a thrifty one in '51! Use Ellison's Mott strain of three-banded Italians. No disease and guaranteed to please.

QUEEN PRICES

1 to 10 \$1.00 each
11 to 2095 each
More than 2090 each

C. G. ELLISON & SONS
Selton, S. C.

FREE . . .

A Sample Copy

"Gleanings in Bee Culture"

LOOK IT OVER

YOU WILL LIKE IT

A. I. ROOT CO., Medina, Ohio

LIGHT ITALIAN

2-lb. ----- \$2.75
3-lb. ----- 3.75
Additional pound—\$1.00
Queens each—85c

For queenless package deduct price of queen.

Queen clipped on request.

B. A. ANDERSON & CO.
Opp, Alabama

BEE SUPPLIES

A. H. Rusch & Son Co.
MANUFACTURERS—JOBBERS
REEDSVILLE, WISCONSIN

\$\$\$

Are Lost Each Season by
Beekeepers Trying to Save
\$ \$ \$ \$



For
QUALITY Package
Bees and Queens

Write

WEAVER APIARIES
Navasota, Texas

PACKAGE BEES AND QUEENS

I Have ITALIAN Bees

Full weight, prompt shipment,
live arrival guaranteed. Health
certificate with each shipment.

Book your orders early.

2-lbs. with queen ----- \$2.00
3-lbs. with queen ----- 3.50
4-lbs. with queen ----- 4.75
Queens ----- \$1.00 each

Raymond McFarling
Shannon, Miss.

Treat Your Hives With

CUPRINOL

STOPS ROT

Applied by brush, spray or dip to the bare wood. Cuprinol will greatly lengthen the life of your hives by stopping rot. May be painted over. Does not offend bees. At hardware, paint and lumber dealers or direct. \$4.70 gal.; \$1.75 qt. Check or money order. No C.O.D.'s

CUPRINOL Division, Durworth Inc.
61 Maple St. Simsbury, Conn.



THE NEWSREEL



First CROP Car

First carload of food from New York state to be included in a Friendship Train sponsored by the Christian Rural Overseas Program, was a railroad car of 36,000 pounds of honey, dedicated at the plant of the Finger Lakes Honey Producers Cooperative, Inc. in Groton. The Coop served as an assembly point for individual contributions of honey, but the major part was purchased by CROP from Finger Lakes. This food goes to institutions sponsored by the churches abroad to feed people who are not cared for under the Marshall plan.

William L. Coggeshall,
Cornell University.

Iowa 1949 Report

From the State of Iowa at Des Moines, comes the 1949 Report of the State Apiarist, F. B. Paddock. He is to be complimented as are the contributing authors. This report should be read by everyone.

The first few pages are devoted to a progress report of the work being done in Iowa, including the Honey Plant Garden, disease-resistant stock, pollination, honey production, 4-H club work, and disease control.

The last 50 pages of the 150-page book are a complete report of the National Pollination Conference held in 1949 at Seattle, Washington. Here are included the addresses of ten different authors on all phases of pollination and honey plants, including wildlife, railroad right-of-way, roadsides, forests, fruit, drug plants, bee poisoning, soil conservation, and the general subject of seed and vegetable and legume production, as well as extension phases of the work.

Included in another part of the report are articles by W. L. Coggeshall, Ed Braun, R. L. Parker, G. F. Townsend, F. R. Shaw, E. F. Timson, J. A. Munro, H. F. Menke, and M. H. Haydak.

Many of these articles have never before been published, and the assembly of the reports of the pollination Conference are invaluable.

New Federation Director . . .

From the office of the American Beekeeping Federation comes the announcement that Mr. Edw. A. Wolfe, for several years associated with the North Platte Experiment Station of the University of Nebraska, will move to Atlantic, Iowa, on May 1 and join the staff of the Federation as Director of Public Relations.

Publicity coming from the Federation office has been basically responsible for the increased demand for bees for pollination and the increased return coming to beekeepers for that service.

Mr. Wolfe has served as Secretary-Treasurer of the Nebraska Honey Producers Association for four years and materially assisted in making pollination profitable to both beekeepers and seed growers.

He will devote a major part of his time to increased publicity and to bringing to the constant attention of the general public a great variety of interesting information about bees, beekeepers, pollination and honey.

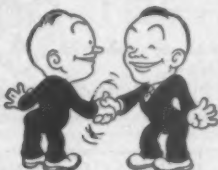
CARE Aid Urged for Korea

CARE is appealing for funds to send relief packages from Americans to war-devastated Korea, whose people are in desperate need of food and clothing.

Contributions in any amount sent to CARE for Korea, 20 Broad St., New York 5, N. Y., or any local CARE office in this country, will be used by the non-profit agency to deliver gift packages, in the name of the donors, to destitute Korean families chosen on the basis of greatest need.

Six types of CARE packages are available: Food, underwear and socks, or woolen suiting, at \$10 each; knitting wool, \$13; woolen blanket and cotton fabrics, \$7 each. Contributions less than the cost of a complete package will be pooled. All donors will receive a CARE receipt.

For Honey Production



For Pollination

For The Hobbyist

AIRMAIL OR WIRE YOUR RUSH ORDERS TO US FOR PROMPT SHIPMENT

Regardless of the purpose for which you use bees, we can serve you to your best interest. Our modern equipment and methods enable us to put out the very highest quality and yet give you popular prices.

Some years ago the Yellow Italian bee enjoyed a tremendous popularity. They were beauties, too, but apparently some breeders based their selection on color alone, and sometimes gentleness, too; neglecting all other necessary qualities. Some buyers even accused breeders of introducing Cyprian blood for color improvement. For many years as a honey producer handling all strains and races of bees in the North, I noted the many exceptional qualities of the Yellow Italian bee above other races. When I became breeder and shipper of package bees and queens I was delighted for the opportunity of selection of these bees. I have found it possible to develop their good traits and weed out the bad. We have developed a strain of yellow Italians that rank at the top for commercial honey production and they are also gentle to handle. Point for point, they are the bees you want. Their reputation has grown and grown. First all over the U. S. and Canada, and then we have had to ship thousands of queen bees to the far corners of the World.

NEW 1951 PRICES

Lot	Queens	2 Lbs.	3 Lbs.	4 Lbs.	5 Lbs.
1-5	\$1.35	\$3.55	\$4.50	\$5.45	\$6.40
5-15	1.30	3.50	4.45	5.40	6.30
15-25	1.20	3.40	4.35	5.25	6.20
25-100	1.15	3.30	4.25	5.20	6.10
100 up	1.05	3.20	4.15	5.05	6.00

Select Tested Queens—Before June 1, \$10.00. After June 1, \$5.00.

Above package prices include queen. Queenless packages, subtract \$1.00 from price of package with queen. All queens are airmail, postpaid, but package bees are F.O.B. shipping point and are shipped Express collect. It is preferable to ship package bees by Railway Express, however, they can be mailed and in that event, customers should include postage.

TERMS:

Small orders, cash in full. Large orders, 20 per cent deposit, balance to be received two weeks before shipping date. U. S. Funds. A 10 per cent discount is allowed on package bees if shipment is to be made after May 20th. A 20 per cent discount is allowed on queens if shipment is to be made after May 20th. And a 25 per cent discount is allowed on queens to be shipped after June 1st.

A FAMOUS STRAIN OF LIGHT COLORED ITALIANS

Produced by the world's most modern breeding establishment

THE DANIELS APIARIES **Picayune, Mississippi**

A New and Better . . .

STARLINE HYBRID



Produced under natural conditions by approved methods. Write for prices.

J. M. CUTTS & SONS

Chipley, Florida



"Honey in the Comb"

By Carl E. Killion

Have you ordered your copy of this book? Do not delay!

Order now and prepare to produce the kind of honey the public wants. Honey in the comb finds a ready market. It is the finest quality that gets the premium price. This book should help you produce that kind of honey.

Price of the book is \$3 postpaid.

Killion & Sons Apiaries
Paris, Illinois



ITALIAN QUEENS — PACKAGE BEES

	1 to 49	50 to 99	100 and up
2 lb. with queen	\$2.50	\$3.25	\$3.00
3 lb. with queen	4.50	4.25	4.00
4 lb. with queen	5.25	5.00	4.75
5 lb. with queen	6.00	5.75	5.50
Italian queens	1.10	1.10	1.00

Packages are shipped with full liberal over-weight and live arrival guaranteed. Our dealings with you must be 100% satisfactory. Replacement or refund on any shipment when bad order receipt is received by us. Our queens are second to none in performance. Queens clipped on request and sent airmail postpaid.

GEO. A. HUMMER & SONS

Established 1892 Western Union—Macon, Miss. Prairie Point, Miss.

Knight's Three-Banded Leather Colored

ITALIAN BEES AND QUEENS

	Queens	2-lb. pkg.	3-lb. pkg.	4-lb. pkg.	5-lb. pkg.
1 to 24	\$1.50	\$3.50	\$4.50	\$5.50	\$6.50
25 to 49	1.10	2.55	4.25	5.25	6.25
50 and up	1.00	3.00	4.00	5.00	6.00

For queenless packages deduct the price of the queen.

Prompt Service

Full Weight Packages

NO CHARGE FOR CLIPPING

Young Laying Queens

Your Satisfaction Guaranteed

JOHN T. KNIGHT

Hayneville, Ala.

BEES and QUEENS

Send for FREE Circulars

Booking orders now.

Over 30 years a shipper.

Blue Bonnet Apiaries

Weslaco, Texas

Package Bees and Queens : Bright 3-Banded Italians

NOW BETTER
We Guarantee Safe

Arrival. 1 to 24
Packages F.O.B. 25 to 99
Queens Prepaid. 100 up

	Queens	2-lb. pkg.	3-lb. pkg.
Package Bees with Queens			
1 to 24	\$1.10	\$3.50	\$4.50
25 to 99	1.00	3.25	4.25
100 up	.90	3.00	3.90

TAYLOR APIARIES

Box 249, Luverne, Alabama

Select

Italians

QUEENS

Package Bees

M. C. WEST

DAVIS, CALIFORNIA

KOEHNEN'S Package Bees and Queens

For Quality and Service

KOEHNEN'S APIARIES
GLENN, CALIFORNIA

ITALIAN PACKAGE BEES & QUEENS

for 1951

Write for Prices

GIRARDEAU APIARIES

Tifton, Georgia

CANADIAN BEE JOURNAL

Canadian beekeepers have much in common with their neighbors in the U.S. If you are interested in bee activities "Worth of the Border," send us your subscription NOW. Subscription price, \$1.75 per year in U.S.A.

Canadian Bee Journal

54 Bloor St. West, Toronto 5, Ontario

Dadant's Foundation For Bulk Comb Honey

A special, light colored foundation, somewhat heavier than thin super, but lower in price. White, beautiful comb honey packed in glass and surrounded with a fine grade of liquid honey is a package that customers just want to buy.

DADANT & SONS, Inc.

HAMILTON, ILLINOIS

ITALIAN BEES AND QUEENS

1951 SEASON

	Queens	2-lb. pkg.	3-lb. pkg.
1-50	\$1.10	\$4.00	\$5.00
51-100	1.00	3.75	4.75

Write for prices on larger orders.

Place your orders early.

BAKER APIARIES

C. W. Baker

Phone 3648 Livingston, Ala.

THE LEAST EXPENSIVE COMBS YOU CAN GET —

Combs from Dadant's Crimp-wired Foundation have little non-profit space—no sagged areas; no distorted cells; few drones. There will be very few combs to discard. Each comb, with reasonable care, will last almost as long as your beehive. So every comb you have becomes a long-term investment. They start to save you money the moment the bees have built them. In the end they are the least expensive combs you can possibly get.

DADANT and SONS,

Inc.

Hamilton, Illinois

All Around The Bee Yard

by G. H. Cale

"Water, water everywhere and
not a drop to drink";

It spatters on the ground around
And how the stuff do stink!

(Apologies, Mr. Coleridge. Your
ancient mariner must have been a
beekeeper.)

For days and days it did that so
it's not just a fancy way to start
this department. Then all the water,
north, east and west, collected up
and spouted into one channel, the
mighty Father of Waters. He proceeded
to unburden his load over the farms
and homes of foolish mortals, and
maybe on foolish beekeepers' bees.

We were wise this time. Did not
have a bee anywhere near the water.
But one yard of mine has been shut
off up to now. I'm getting anxious
to see it as there may be some colonies
there that need feed.

Also this spring is so late. We
had to get another ton of coal to
keep warm in mid-April. I'll bet
that before blackberry winter, the
last of May, that coal will be gone.
(Blackberry winter here comes
when blackberries bloom. It is usually
the last cool weather of the season.)

Fruit bloom will hardly be open
until well into May. Dandelions will
be late with their golden pollen richness.
Redbud, usually here for sure,
either in bud or bloom by April 25
(never knew it to fail to meet that
date in twenty-five years) will this
time do well to show any pink until
May has come.

Under such conditions colonies
build up slowly and need lots of
food. Watch them. When the early
bloom comes check the queens. The
poor ones should show up better
than usual this time. Replace the
poor ones with nice, new, freshly
mated mothers. Best piece of management
I know about.

"Bee-Wise," the mimeographed
bulletin from the Apiary Branch of
the British Columbia Department of
Agriculture, in its January issue,
says: "We are very proud of the way
British Columbia beekeepers have
adopted the use of sulfathiazole in
the prevention of American foul-

brood. We are also proud of the
way our beekeepers have educated
themselves to be able to detect disease
in its early stages and the steps
they take to see that it spreads no
further. The policy of the Apiary
Branch for the past decade has been
to help the beekeeper help himself
and it is paying off in better informed
beekeepers who know more
about their bees and bee behavior
than ever before."

By way of comment, first I am
glad to learn that, officially, preventive
feeding is recognized and advised.
Second, that the enlightened attitude
of the Department results in an opinion
about the beekeepers of the Province
that is as high as the one expressed.

Richard Albrecht, Illinois field editor
of the *Prairie Farmer*, came to see
us about the present status of
pollination. Maybe he left with more
information that he had when he
came. We hope to see some of it
in the magazine. Also, the report
that Ed Wolfe gives of the Ardmore
meeting on pollination shows that
agriculture as a whole is jumping
way ahead of the beekeeper in interest
in pollination. Most of the Ardmore
attendance was made up of county
agents, soil conservationists, agronomists,
farmers, seed growers, machinery
makers, and like folk who really want
to know about this new thing which
means so much to them.

The Michigan Honey Institute
sends a panel folder in black and
yellow with the title "You'll Favor
the Flavor with Michigan Honey." Like
that? I do. It almost "tastes" well.
The folder features: how to store
honey, how to measure honey, fruits
and cereals with honey, honey for
glazing, then some good honey recipes.
Note that the raw uses come first.
The most important uses of honey
are for honey just as it is. More
people will use honey if they learn
to use it without having to master
a recipe that calls for its use in
cooking.

Maybe I'm not a good judge but,
as far as I am concerned, I like

honey for its own sake. My wife
has a few favorite honey recipes—
candied sweet potatoes, honey pumpkin
pie, some cookies, one or two cakes—
but she seldom troubles to learn
more and her use of honey just as
it is, is several times over the amount
she uses in these few recipes. So I'm
for more raw uses and the more the
better.

According to "B" notes, Colorado
A & M College, for March, Dr. W. R.
McCuiston, D.V.M., advises feeding
honey to correct Vitamin B deficiency
in young goats. This deficiency causes
wobbly legs in the kids. They fall
frequently and have a difficult time
getting back on their feet. An ounce
of honey is given during each 24-hour
feeding schedule. The regular feeding
of honey will provide sustenance and
vitamins for all kinds of wobbly
legs except those caused by alcoholism.
(The original material appeared in
the March issue of the "Dairy Goat
Journal.")

Alice Wagner, editor of "Popular
Dogs," also reports that the feeding
of honey is a splendid addition to
the diet of pups and their mother.
She tried it on the advice of Dr.
Howard Walters, of Depew, New York.
Just yesterday we received an article
from Dr. Walters giving his more
extended use of honey for dogs.

So here is the entering wedge in
the field of animal nutrition. If
honey also does well for calves, or
pigs, or turkeys or chickens—well,
why not? I'll bet my old celluloid
collar that someone somewhere will
find out that we have a completely
neglected field here.

I also wonder how long it will
take to allow children to discover
honey. My grandkids howl for
honey in milk and will drink two or
three glasses at one meal even to
the extent of leaving other food to
fill up on it. When one sees the
roses in their cheeks and the sparkle
in their eyes when this diet continues
it is easy to wish for extensive
diet studies in the use of honey
in child feeding.

MAY 1951 PRICES

BEES • QUEENS

THREE-BANDED ITALIAN

We guarantee full weight packages, safe arrival, young laying queens, prompt service and satisfaction. Health certificate furnished with each shipment!

Shipped by
Express Truck Parcel Post

• PRICES •

F.O.B. Varnville, S. C.

	Queens	2-lb. w. q.	3-lb. w. q.	4-lb. w. q.	5-lb. w. q.
1-24	\$1.10	\$3.20	\$4.20	\$5.00	\$5.90
25-99	1.00	3.05	3.90	4.65	5.50
100-499	.95	2.80	3.60	4.30	5.10

For larger quantities write for prices. For queenless packages deduct price of queen. Tested queen, \$1.00 extra.

TERMS: One-third upon receipt of order; balance 10 days before shipment.

CAROLINA HONEY COMPANY

P. O. Box 163, Varnville, S. C.

Clyde Blankenship, Mgr. G. L. Blankenship, Prop.

WIGHT

PACKAGE BEES AND QUEENS

3-Way Italian Hybrid Combination— High Production

Resistance to A.F.B.

Uniform Colony

Performance



Stock of Dadant & Sons

Reared Under Ideal Conditions

Quantity	Starline Queens		Packages with Starline Queens	
	May 1	May 20	2-lb.	3-lb.
1-24	\$1.50	\$1.35	\$2.75	\$4.75
25-99	1.40	1.25	3.50	4.50
100-999	1.35	1.20	3.25	4.25
1000 up	1.25	1.15		

For Starline Hybrids DEDUCT 25c per package May 20.
For additional bees add \$1.00 per lb.

Wicht Reliable 3-Banded Italians

Lower Prices — For our own reliable 3-Banded Italian Queens and Packages with Queens May 1 to May 19, deduct 25c each from the above price schedule. Packages May 20, deduct 50 cents.

May 20 to June 1 Prices
of Our 3-Banded Italian Queens

1 to 50	\$1.00
50 up	.90

WIGHT APIARIES

406 Miller St.

Hattiesburg, Miss.

SERVICE

QUALITY

DEPENDABILITY

Here We Are Folks:

It is nearly time to start shipping

PACKAGE BEES

Have you given us your order?

We have not waited for your order but have made plans far in advance to ship your bees. Our cages, cans and other necessary supplies are stored and ready to use on a moment's notice.

Our colonies are in the best condition in years for production of Package Bees. Healthy well fed colonies mean better bees for you.

We will feature "Three Way Hybrids" (Kelley's Island Developed) at no extra cost to you. State which queens you want in your packages, otherwise we will ship our regular stock.

Prices as follows:

	Queens	2 lb. w. q.	3 lb. w. q.
1 to 25	\$1.10	\$3.25	\$4.25
26 up	1.00	3.00	4.00

Queenless package deduct price of queen.

"THEY PRODUCE"
ROSSMAN & LONG

P. O. Box 133

Moultrie, Ga.

Three-Band Italian Package BEES AND QUEENS

and Pure Italian Three-way D. R.

Queens



Full weight, prompt shipment. Young bees. State health certificate with each shipment. Live arrival guaranteed.

Replacement or refund made promptly upon receipt of bad order from your express agent.

1951 PRICES

WITH YOUNG LAYING QUEENS

	2-lb.	3-lb.	4-lb.	5-lb.
Lots of 1 to 29	\$3.00	\$3.75	\$4.50	\$5.25
30 or more, each	2.75	3.50	4.25	5.00

Tested queens \$2.00 each.

Untested queens \$1.00 each.

For introduced queen add \$1.00 per package. If queenless bees are wanted deduct \$1.00 from the package price.

JACKSON APIARIES

Funston, Georgia, U. S. A.

The Postscript

by Frank C. Pellett

From P. A. Ingvason, of Las Cruces, New Mexico, comes comment on the bushy alfalfa (*Medicago arborea*). He suggests that he would like to secure seed for planting in Mexico, as it is considered to be good as a browse plant in the few places where it has been planted in California. He states that old Mexico has a wonderful scope for forage legumes of different kinds. He says there is a good prospect for a project in Chihuahua. He has in mind to carry out some planting for a grazing test and seed culture in the Sierra Madre foothills. If only I am able to get around again, I would be very happy to join him in such an investigation.

This is the first year that I remember when zero weather continued until almost April first. About thirty inches of snow has fallen over much of Iowa during the month of March. Newman Lyle reports that the colonies he has unpacked are mostly in fine condition. He plans to divide and introduce queens to prepare new colonies for pollination. Had it been possible to feed pollen supplement as early as usual, he might have made divisions as early as April 20. What can yet be done will depend upon the weather during April and May. Any weak colonies, or any not needed for pollination, will be united at the beginning of the honeyflow.

My grandson, Harold, had the seed of zigzag clover well started in the greenhouse by the middle of March. It would be one of our most desirable forage crops if we could secure pollination. It will be remembered that zigzag clover rarely sets seed in the United States. As has been mentioned on this page before, Harold hopes to increase the seed production by careful selection from plants yielding the largest number of seeds. C. V. Porter, of Menomonie, Wisconsin, has long been interested in zigzag and Harold is growing seed received from him along with his own.

Frank McLaughlin, of Kansas City, inquires about the value of rosemary for bees. It is a famous

shrub among beekeepers. But it is too tender to stand the winters of Iowa and Nebraska. But we would expect that it might succeed in Kansas City. I would like reports from those for whom it does well.

We have an inquiry for low-growing hedge plants to use with a low garden wall. The old-fashioned garden hyssop is quite hardy, does not grow much above two feet high and is one of the best of the bee shrubs. Do not confuse this with the herbaceous anise hyssop. Anise hyssop is an herb growing three feet to five feet high, while the garden hyssop is a low shrub of half that height.

My usual letter from H. Malcolm Fraser always contains new items of information. Apparently they are not finding a more pleasant spring in England than we are having in this country. Even the bees are staying in the hives and the ground is so sodden that sowing seeds is out of the question. He gives an interesting account of the recording of many sounds from the hives and played back by radio over a loud speaker. These include happy hives, queenless hives, the drones, the newly emerged queen piping, the old queen, the queen still in the cell and the swarm which was being hived, and others. Certainly this would be a new and interesting entertainment for a beekeepers' program.

From California comes an inquiry as to the honey yield of the avocado trees and whether it is worth while to move the bees just for the avocado bloom. The areas in which avocados are grown on a sufficient scale to offer bee pasture are very small in southern Florida and California. Reports concerning the honey yield are very conflicting. Some beekeepers report that the yield is extremely light, while others tell of fair returns. Not enough information is available to enable one to form a very definite opinion.

The avocado is so new in this country that there is very little dependable information available concerning it. The source of honey yield from newly introduced plants is of-

ten misleading, because the localities where they first become established are not the places where they find their widest use. For this reason, it is hardly safe to make an estimate of the probable value of the avocado when it has been generally planted in the areas to which it is well suited. Beekeepers who have had opportunity to observe their bees on the blossoms of these trees will confer a favor by reporting their observations.

The March issue of *Soybean Digest* has an extensive article discussing the many reported reasons for failure of clover and alfalfa on land previously planted to soybeans. There are so many such failures reported that they cannot be ignored and, in some neighborhoods, farmers are said to be giving up the growing of soybeans entirely, rather than risk failure with later crops in their rotation. Anything affecting the clover crop is of much interest to the beekeepers since their pasture is directly involved. With millions of acres now devoted to soybeans, farmers are very much concerned about anything which interrupts their crop rotation. The soybean has now attained so much importance as to require full attention in connection with any problems that may arise.

C. F. Turnipseed writes to tell me that one section of the Columbia Basin is now under irrigation and farmers are going into seed production rather heavily. Most of the acreage thus far has been planted to Kinland red clover which the bees work very well. There was no surplus honey but a very good seed set, which promises much for the future of red clover seed in that region.

He also reports that, in central Oregon, plans are under way to use twenty-five thousand colonies of bees for the pollination of Ladino clover. Farmers at last have discovered that bees are a must in order to produce Ladino clover seed. The interest in bees for pollination is growing so rapidly that beekeepers find it hard to keep pace with it.

Atlantic, Iowa

Package Bees and Queens

QUALITY THREE-BANDED
ITALIANS:

To May 19th

	2-lb. w. q.	3-lb. w. q.	4-lb. w. q.	Queens
1-34	\$3.25	\$4.25	\$5.15	\$1.10
25-99	3.15	4.10	5.00	1.00
100-up	3.00	3.90	4.90	.95

For packages with Dadant's Starline Hybrid queens add 25c per package.

FROM MAY 20TH deduct 25c per package and 15c per queen.



Dadant's Starline Hybrids are
Genuine Disease Resistant Queens.
For further description see our
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	To May 19th	From May 20th
1-34	\$1.45	\$1.35
25-99	1.35	1.25
100 up	1.30	1.20

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UNITED STATES.

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TYPES OF YOUR HONEY.

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and our Wood Goods Mill in Madera, California.



The heart of comb honey is founda-
tion. The biting quality of the
honey, that delicate center taste is
foundation. It must literally become
a part of the honey, so tender, a
touch of the tongue will crumble it;
yet be so strong that bees work it
out quickly and easily. Dadant's Sur-
plus Foundation, fragrant and pure,
thin and sweet, blends so naturally
with your finest comb honey, that
your market grades are better and
your sales are quicker.

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Use the LOTZ SECTION, no finer
section made, to produce fast selling
comb honey.

We also carry a complete line of bee-
keepers' supplies and glass and tin con-
tainers.

Write for our new price list—

AUGUST LOTZ COMPANY

Manufacturers and Jobbers
of
Bee Supplies

Boyd, Wisconsin

YOUR CHOICE of Three Outstanding Breeds THE BEST TO BE HAD AT ANY PRICE.

REGULAR ITALIANS:

Our regular stock, bred for high honey production, will not swarm unless neglected. Positively gentle.

CAUCASIAN:

We are using the best breeding stock to be had in America. These bees are grey in color and very gentle. Heavy producers.

PRICES:

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25-99
100 up



DADANT'S STARLINE HYBRIDS ARE DISEASE RESISTANT

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Queens	2-lb.	3-lb.	4-lb.
1-24	\$1.50	\$4.00	\$6.00
25-99	1.10	3.75	4.75
100 up	1.00	3.50	4.50

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HONEY EXTRACTORS AND EQUIPMENT

Ten different sizes and styles to cover the field of requirements from the smallest to the largest producer. All priced as to capacity and performance.

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Who are already pleased with**

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SERVICE

ITALIANS

Book Your Order Now

CAUCASIANS

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No Deposit Required

PRICES

Prices to May 20th

In Lots	Queens	2-lb.	3-lb.	4-lb.	5-lb.
Of:	Each	w. q.	w. q.	w. q.	w. q.
1 - 24	\$1.15	\$3.50	\$4.40	\$5.30	\$6.20
25 - 99	1.05	3.25	4.10	4.95	5.80
100-499	.95	3.00	3.80	4.60	5.40

Tested Queens \$1.00 Each Extra

Prices After May 20th

In Lots	Queens	2-lb.	3-lb.	4-lb.	5-lb.
Of:	Each	w. q.	w. q.	w. q.	w. q.
1 - 24	\$.75	\$3.00	\$3.85	\$4.70	\$5.55
25 - 99	.70	2.75	3.55	4.35	5.15
100-Up	.60	2.50	3.25	4.00	4.75

Tested Queens \$3.75 Each Extra

Queens Postpaid-Airmailed and/or Clipped—No Extra Cost
For Queenless Package, Deduct Price of Queen
Packages F.O.B. Shipping Points

The Stover Apiaries
Mayhew, Mississippi

Attention, Please! Bees . . for pleasure and profit

This covers Mr. Beekeeper, large or small; Mr. Farmer, who grows seed crops which need bees for pollination to ensure more and better seed production (when seed crops are pollinated by bees); and Mr. Fruit-grower, who needs bees for pollination in 1951. We warn with an important message to one and all: If you have tried and failed, you must try again. Don't give up the ship. We haven't, and both success and pleasure have come our way.

DON'T let your empty equipment lie idle for 1951 Mr. Beekeeper, whether one hive or a hundred, at the price of package bees and queens. For seed crops, farmers need bees for more seed production per acre. Fruit growers need bees for pollination. Our nearest seed-cleaning plant reports — No bees, no seed crop — same for fruit.

WE HAVE TO OFFER YOU—YOUNG HIGHEST PRIME QUALITY PACKAGE BEES AND QUEENS
(Liberal overweight)

THE IMPROVED STRAIN of three-banded Italians, backed by over 30 years' careful selecting, breeding, and shipping to all points in U. S. A. and Canada. Each year our breeding and mating stock is carefully picked and tested out for the coming season from hundreds of best by test colonies, which gives you benefit of each season's improvement when buying from us.

We are booking orders for the season of 1951, plan your requirements for this season and place your orders early. We are working each day from now on to fill your orders promptly on the day you want them with the very best of **QUALITY BY TEST**. Let us know your 1951 requirements. We guarantee to please you in every respect or money cheerfully refunded. Shipment guaranteed on date you desire. We can take care of your rush orders from March 15th on. No disease. Health certificate with each shipment.

1951 LOW PRICES

Orders booked 20% down payment, to confirm. Balance due 10 days before shipment

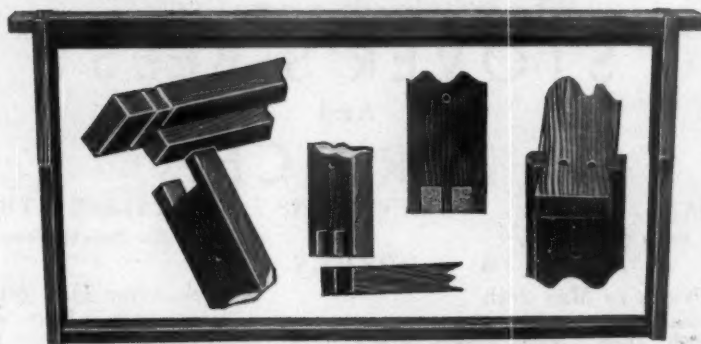
	Queens	2-lb. with queen	3-lb. with queen	4-lb. with queen
1 - 24	\$1.00	\$3.25	\$4.00	\$4.50
25 - 99	.90	3.00	3.50	4.25
100 - up	.85	2.75	3.50	4.00

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The Walter T. Kelley Co. Box 210 Paducah, Ky.

Market News

by M. G. Dadant

Northeast

Beekeepers in this area are just beginning to get into their bees. Generally, a mild winter was reported with the bees coming through with little loss, probably not over 5 per cent so far for the territory as a whole. At the time these reports were sent in, about April 10 to 15, the spring had been very backward, with lots of cloudy, rainy weather. As a result, most colonies had little brood. Many hives appeared short of stores with considerable feeding necessary and the likelihood of spring dwindling.

Without exception, prospects appear very bright for a good honey crop, better than last year. Plenty of moisture most everywhere.

Most beekeepers apparently intended to make up their winter loss by either divides or packages. Little if any increase in the number of bees appears in prospect, several reporters mentioning that comparatively low honey prices and high labor costs would make increase impossible.

Practically all the 1950 honey crop has been moved, so the new crop can pretty well stand on its own feet.

South

Winter losses in this area appear to be minor although one or two reports indicated losses up to 20 or 25 per cent. Colonies coming out of the winter were in good condition, some reporting them in excellent shape. The shortage of honey stores will probably make considerable feeding necessary before the flow. The season is generally late with honey plants being retarded about two weeks. Most reports of prospects for a crop were fair to good although there has been a shortage of moisture in the central south.

Although most winter losses will probably be made up by divides, without exception there will be no increase in the number of colonies operated. Here again the 1950 crop is almost completely cleaned up, with no carry-over to hinder sale of the 1951 honey.

East-Central

Wintering conditions in this area were quite spotty. Winter loss re-

ports ranged from 2 per cent up to 50 per cent with perhaps an average of around 10 to 15. The condition of overwintered colonies also varied greatly, although the majority of reports indicated above average condition. Most hives will need close attention this spring to avoid starvation after the long winter.

Snow covered the ground for a good share of the winter throughout most of this section so that honey plants have come through in good condition. Plentiful moisture should make excellent prospects for an above average honeyflow. One reporter did indicate an apprehension that some stands of clover would be plowed under to provide more corn acreage.

There are still some empty hives in parts of this area as a result of a few years of low honey prices, but reporters indicated that losses during the past winter would be made up by packages and division. Very little expansion planned. Ninety to 95 per cent of the 1950 crop has been sold with honey buyers still active.

West-Central

Winter losses ranged from 5 to 10 per cent in most of the country up to as high as 20 to 25 per cent in parts of Minnesota. Colonies are in good to excellent condition, but probably are needing feed to carry them through the slowly developing spring. Moisture conditions satisfactory with honey plants in good condition. Here again it was mentioned that some farmers are planning to plow under clover stands in cooperation with the Department of Agriculture's call for heavier corn production.

Increased interest in pollination in parts of this area will probably mean some increase in bees to fill the demands of seed producers. Honey is mostly out of the producers' hands, with sales reported fair in recent months.

Southwest

Light wintering losses, probably will not run over 5 per cent. Col-

onies came through in fair to good condition with some shortage of food and pollen. However, the honey plants are also slow in developing, so perhaps the two are fairly well coordinated. Lack of rain appears to have damaged honey plants to some extent in the northern part of this area. Freezing weather down into the Rio Grande Valley will probably hurt the crop there.

This area probably has had more impetus from pollination than most others. Cooperation with legume seed producers will probably mean some increase in the number of colonies operated over the area as a whole. Honey is almost completely sold out with some producer-packers trying to locate honey to buy.

Mountain States

Only very light losses reported from wintering throughout this territory. Colonies coming through winter appear to be in excellent condition, with only a few reports of shortage of stores and pollen. Many areas had shortage of moisture throughout the fall and winter. Late winter rains have helped to remedy this situation.

Not much expansion planned. Some beekeepers seem concerned over the increased use of weed killing sprays. 1950 honey crop almost completely cleaned up except for some in storage in this area for co-operative packers.

Far West

Winter losses will probably not run over 5 per cent and likely less. Overwintered colonies are in good condition. Spring flowers in California generally produced considerable nectar. The orange flow started around April 10, when these reports were sent in, and bees were storing a surplus. The shortage of rain would probably hurt the crop as a whole.

Here again pollination is making a rapid change in the picture with many thousands of colonies devoted to this work. In heavy seed producing areas, there may be some increase in the number of colonies operated, although for the area as a whole, the number will likely be about the same. Not over 5 to 10 per cent of the 1950 crop is still on hand.

Honey Wanted— Care and less than
car. Top Prices.
C. W. Appleby Co., Oconomowoc, Wis.

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BEES AND QUEENS

CAUCASIANS—2-lb. pkg. \$3.00; 3-lb. pkg. \$4.00. Untested queens, \$1.00. Tillery Brothers, Greenville, Ala.

QUEENS OUR SPECIALTY—Italians, 90c each; Carniolans, \$1.25 each; Caucasians, \$1.00 each. All queens shipped by Air Mail and guaranteed to please. Walter D. Levette, Box 364, Ft. Pierce, Fla.

YES, ALL COMPARISONS prove that Green's profit producing queens are the best to be had. They will please you from the brood nest to the harvesting of a great crop of honey. Backed by 23 years of breeding better queens. Price, 90c each. D. P. Green, Deland, Fla. Rt. 2, Phone 512M.

BREWER LINE-BRED Caucasian queens—1-24, \$1.25; 25-59, \$1.15; 100 up, \$1.00. Booking orders for April 1. Brewer Bros. Apiaries, 3616 Caucasian Circle, Tampa 9, Florida.

THREE Banded Italian bees and queens—Best of quality and extra good workers. 2-lb. with queen, \$4.00; 3-lb. with queen, \$5.00 each. Select untested queens, 1 to 25, \$1.20; 25 to 50, \$1.10; 50 up, \$1.00 each. A trial order will convince you. Phone 4703, Alamance Bee Co., Geo. E. Curtis, Mgr., Graham, N. C.

GOLDEN ITALIAN BEES AND QUEENS—Real gentle and good workers. 2-lb. with queen, \$4.00; 3-lb. with queen, \$5.00. Select untested queens, 1 to 25, \$1.20; 25 to 50, \$1.10; 50 up, \$1.00. Health certificate with every order. Carolina Bee Farm, Graham, N. C.

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GRAY CAUCASIAN QUEENS—\$1.00 each. Eppling's Apiaries, "Idelwilde," Covington, Virginia.

OUR QUEENS are Italians of the Geo. W. Moore strain, are line bred and purely mated. For the remainder of the summer our price will be 75c each, in any numbers. Hanson, Hall Bee Co., Livingston, Ala.

GOLDEN QUEENS—\$1.00. Airmail. Some packages. Satisfaction guaranteed. O. E. Brown, Rt. 1, Asheboro, N. C.

4 POUND PACKAGE with queen \$4.00, in lots of 25, after May fifteenth. Bulk bees, 75 cents pound. Valdosta Honey Co., Valdosta, Georgia.

NORMA ROY APIARIES—Italian bees—3 pounds with queen, \$3.00; 3 pounds queenless, \$2.50. Live delivery and health certificate with shipment. Norma E. Roy and Son, Hesser, Louisiana.

3 BAND ITALIAN QUEENS—\$1.00 each; June first, 75c. Health certificate with each shipment. Luther Pickett, Manager, Orange Bee Company, Edand, N. C.

FOR SALE

FOR SALE—Electro Flo Filling Machines. Designed for honey. Fills containers automatically. Write for information or see in operation. Hancock Honey House, Hancock, Iowa.

FOR SALE—Filter presses, filter paper of various types for filtering honey. The Cellulo Co., Sandusky, Ohio.

FOR SALE—Fifty colonies bees, hives, supers, extractors, drawn combs. C. K. Dean, Berwick, Illinois.

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FOR SALE—THE MIRACLE CUT COMB DRIER AND KNIVES complete—Just what beekeepers have been waiting for. Send for circular. Miracle Cut Comb Co., Box 369, Harvey, Ill.

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FOR SALE—Bee hives, supers and other equipment. All in No. 1 shape. Write for list to Chas. Sherwood, Rt. 2, Victor, Iowa.

FOR SALE—Honey house 24 x 42 plus annex livable room and garage on large lot in Hornick, Iowa. 25 miles southeast of Sioux City. Running water, electricity, furnace, 1/4 basement all concrete. Good foundation, new roof. Living room has tiled and finished. Balance is single wall drop siding. Have party at Hornick to show building. Main floor is truck high and double door for loading. Chimney runs to basement for boiler. Ideal for seasonal operation. Lots Hubam. Price \$1400, half cash, 2 years on balance at 5%. H. Birchard, Thief River Falls, Minn.

FOR SALE—10-frame standard and Jumbo depth hives, 22 M.D. hives, covers and bottoms. Equipment for 50 colonies. Write Norman Lee, Rt. 1, Moscow, Iowa.

AM SELLING up to 20 10-frame hives bees-brood, also supers if desired. Have too much work. Price \$8.50 to \$12.50 each, in lots of 3 or more. Disease free. R. Heike, Wenona, Ill.

FOR SALE—Six pound Triner Springless Scale. Factory guarantee. Half price. Also brand new 5 horsepower steam upright boiler. Gordon Bell, Mason, Ill.

FOR SALE—200 colonies of bees, equipment 200 more. Lots shop equipment. Also property and honey house if wanted. Reason, health. Elvin Baughman, Dow City, Iowa.

FOR SALE—19 colonies of Italian bees. Sacrifice on account of growing neighborhood. \$175.00 takes all, including some extra boxes, frames, etc. Absolutely no disease. Peter P. Lembo, 13-21 135th St., College Point, N. Y.

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490 COLONIES in Red River Valley area of Minnesota offered for quick sale. Four story M.D. colonies at \$12.00 with \$3.00 deductible for winter loss. Extracting equipment, tanks, honey pump, etc. Certificate furnished. Warehouse also for sale. Present address, Harold Sundean, Rt. 4 Santa Cruz, Calif.

BEES FOR LEASE AND SALE—Montana, Wyoming, Idaho, Nebraska. Contact Bradshaw & Sons, Wendell, Idaho.

FOR SALE—22 Modified Dadant colonies with all equipment for comb honey production for \$300.00. Write Robert Turner, 109 River St., Iowa City, Iowa.

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WANTED—All grades comb and extracted honey, large or small amounts. Quote price in first letter. Mail sample. King Honey Co., 326 Bales St., Kansas City, Mo.

WANTED—Extra white and light amber honey. Let us ship you the containers. Sell us your honey for CASH on delivery. The Hubbard Apiaries, Manufacturers of Bee Supplies and Comb Foundation, Onsted, Michigan.

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HONEY AND WAX WANTED. Mail sample. Advise quantity. Bryant & Sawyer, 2425 Hunter St., Los Angeles, Calif.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 1360 Produce Street, Los Angeles, California.

WANTED—All kinds and grades of honey. Sample requested. Cole Honey Co., 4460 Piedmont Ave., Oakland, Calif.

CARLOADS or less of honey and wax. Send sample and price. Alexander Co., 819 Reynolds, Toledo, Ohio.

WANTED—Honey in all grades. Submit samples. Highest prices paid. Schultz Honey Farms, Ripon, Wisconsin.

"BEESWAX" carloads or less. Send sample and price. Strahl & Pitch, Inc., 141 Front Street, New York 5, N. Y.

HONEY FOR SALE

ORANGE BLOSSOM HONEY in new 60's. Peter W. Sowinski, Fort Pierce, Florida.

NEW CROP OF HONEY shipped daily from producer in Florida. Pure orange blossom 5-lb. pail \$2.25. Pure Florida cut comb honey, 5-lb. pail \$2.75. No C.O.D. orders; all shipments prepaid. E. R. Riley, Box 1610, Daytona Beach, Florida.

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WANTED

SEVERAL HUNDRED two-story colonies needed to fill seed pollination contracts, June 1st to Sept. 1st. Contact Troy H. Nance, 3764 Jeffrey Ave., Sacramento, Calif.

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THE ONLY COMB FOUNDATION PLANT in the East. We sell foundation, work your wax, render combs and cappings. Robinson's Wax Works, Rt. No. 3, Auburn, New York.

SOUTHERN CALIFORNIA HEADQUARTERS for Bee Supplies. Make our facilities your "Trading Post." Complete stocks. See our Bulletin Board for Budget Bargains. The Diamond Match Company, 1300 Produce St., Los Angeles 21, Calif.

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QUEENBEE PAINTING OUTFIT—\$150. Colony records, 10 for 15c, postpaid. Southwick Apiarists, Waban, Mass.

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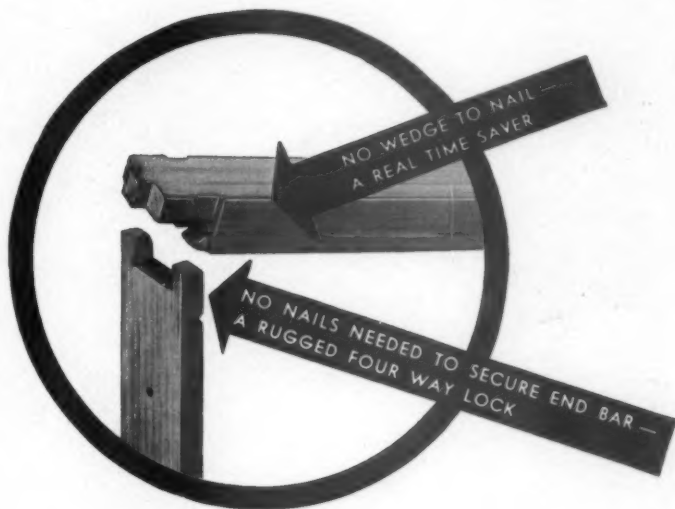
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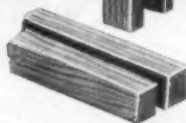
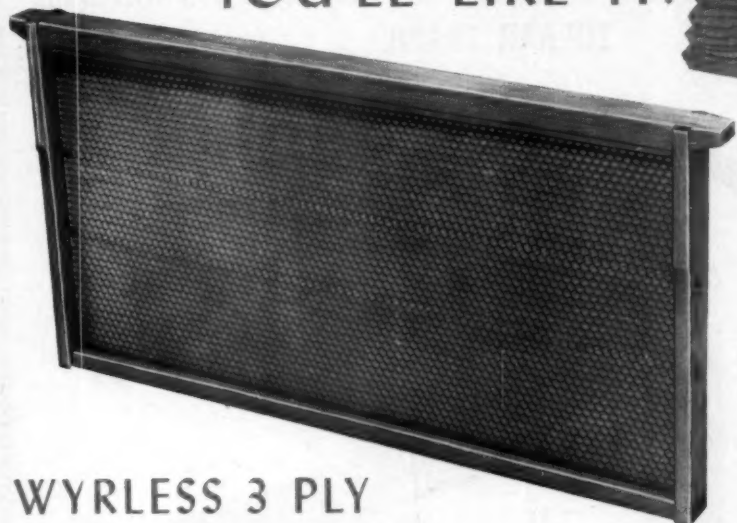
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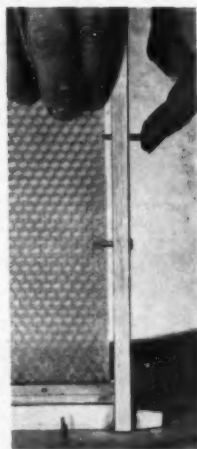
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